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ABSTRACT

This report provides data describing the nursing population as determined by the second national sample survey of registered nurses. A brief introduction is followed by a chapter that presents an overview of the survey methodology, including details on the sampling design, the response rate, and the statistical reliability. Chapter 3 provides a summary of the findings from data on 30,375 nurses who represent an 80 percent response rate. Data are relative to the status of nurses as of November 1980. In chapter 4 the registered nursing population is described in terms of demographic characteristics, educational background, employment status of nurses employed in nursing, and characteristics of nurses not employed as nurses. Each section contains a discussion of the topic with textual exhibits and a set of related tables in the back of the section. Appendixes include the questionnaire, information on statistical methods, information on the reliability of sample estimates and calculation of generalized variances, and tables of sampling errors of selected statistics calculated through direct methods. (YLB)

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NATIONAL SAMPLE SURVEY OF REGISTERED NURSES II
STATUS OF NURSES: NOVEMBER 1980

September 1982

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FOREWORD

Continuing assessment of the number and characteristics of the registered nurse population is essential to a reliable evaluation of the Nation's health resources and to a determination of whether these resources are adequate for meeting the Nation's health care needs. Thus, a major project was initiated in the Bureau of Health Professions in 1975 to design an approach for conducting sample surveys of registered nurses. The first survey using the approach was made in 1977. This publication is based on data collected in 1980 in the second survey utilizing the survey design.

This report was prepared by the contractor, Research Triangle Institute, which conducted the November 1980 National Sample Survey of Registered Nurses using a survey instrument developed by staff of this agency. The report serves as a basic document on the study and its findings, providing a descriptive, overview of registered nurses in November 1980 primarily from a national standpoint. Additional analyses of the data will soon be available from the Division of Health Professions Analysis, Bureau of Health Professions, Health Resources Administration, which is continuing its review and evaluation of the survey results.

We believe that the information in this report as well as the more detailed information soon to become available, will be a valuable addition to the body of knowledge on registered nurses for all those concerned with assessing and planning for the health needs of the country.

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We also appreciate the assistance and cooperation of Dr. Eileen A. McQuaid and her staff at the National Council of State Boards of Nursing, Inc. They were instrumental in establishing our working relationships with the state boards of nursing.

Without the cooperation of all the state boards of nursing this study would not have been possible. Their role in providing the names and addresses of the currently licensed RNs was critical and their willingness to help was sincerely appreciated.

To each of the nurses surveyed who took the time to complete and return the questionnaires, we extend our heartfelt thanks. Without their cooperation, the survey would have been meaningless.

The authors also want to thank the numerous individuals at RTI and its subcontractor, CTB McGraw Hill, whose untiring dedication contributed significantly to the results of the project.

The authors sincerely appreciate all the assistance received; however, we take full responsibility for the contents of this report.

NATIONAL SAMPLE SURVEY OF REGISTERED NURSES II
STATUS OF NURSES: 1980

I. INTRODUCTION

The Bureau of Health Professions within the Health Resources Administration (HRA) has historically been responsible for assessing, developing, and utilizing nursing resources. In order for the Bureau to fulfill its policy-making responsibilities and legislative mandates, it is necessary to obtain and maintain a data base. Over the years, HRA has undertaken numerous data collection efforts in order to build the data base that describes the nurse population. The survey results reported in this document are the most recent of these endeavors.

The legislative authority for the current study is (1) P.L. 94-63, Section 951 (a), which requires "that data be gathered on a continuing basis on the number and distribution of nurses by type of employment and location of practice; on the activity status of nurses; on the rates of compensation for nurses; and on the number with advanced training and their specialties;" and (2) P.L. 94-484, Section 708, which requires that "there be collection systems and analytical studies on the supply of health professionals, including registered nurses."

This survey is the second national sample survey of registered nurses. The first national sample of registered nurses was undertaken for HRA in 1977 by the American Nurses' Association [Ref. 1]. The design for the 1977 survey as well as the 1980 survey, was developed by Westat under an HRA contract [Ref. 2]. The Research Triangle Institute (RTI) conducted this second survey for HRA under contract number HRA 232-80-0042. In this study RTI selected the sample, conducted the mail survey and processed and analyzed the data. A summary of the methodology used in obtaining the data is presented in Chapter II. Chapter III provides a summary of the findings while Chapter IV presents data on the general characteristics of nurses, their education background, their employment status, and their mobility.

II. SUMMARY OF METHODOLOGY

This chapter presents an overview of the survey methodology including details on the sampling design, the response rate, and the statistical reliability.

A. Survey Methodology Overview

The project was to conduct a mail survey of a sample of approximately 40,000 registered nurses. The initial step in this survey was to identify all the nurses licensed in the United States from which the sample was to be drawn. This task was accomplished either (1) by obtaining from each state board of nursing a data tape or a list of all the nurses currently licensed by the state, or (2) by visiting the state and obtaining from their files a list of the names and addresses of the nurses to be included in the sample. From these tapes and lists an initial sample of nurses was selected using the sampling procedure established in selecting the first national sample.

Since a nurse may be licensed in multiple states, a process was implemented to identify, to the degree possible, those nurses with multiple licenses. A mailing list was then developed using the unduplicated list. A lead letter was sent to the nurses to provide them with information about the upcoming survey and to identify those nurses for which the addresses were incorrect. Nurses with incorrect addresses were traced by telephone and corrected addresses obtained.

Questionnaires* were mailed to each of the sampled nurses. Approximately 3 weeks after the questionnaire was mailed, a postcard was sent to the nurses urging them to complete and return the questionnaire as soon as possible or, if they had already completed the questionnaire, thanking them for their effort. Nurses who did not return the initial questionnaire were sent a second questionnaire, and after allowing time for these nurses to respond to the second mailing, a third followup was made. Finally, calls were made by telephone interviewers to the nonrespondents encouraging them to return the questionnaire or to complete the questionnaire over the telephone.

B. Sample Design

The National Sample Survey of Registered Nurses II is the second implementation of a survey design that was developed in a previous study [Ref. 1,2]. During the initial implementation, in 1977, many details of the design were developed. The purpose of the established design is to provide a framework for periodically making timely and acceptably precise estimates of important characteristics of the currently licensed registered nurse population of the United States. The data necessary for making the desired estimates are provided by respondents to a questionnaire that is mailed to a probability sample of registered nurses selected from the target population. The target population of the present survey consisted of all registered nurses who had an active license to practice nursing in one of the 50 states or in the District of Columbia at any time between August 16 and November 2, 1980.

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*See Appendix A for a copy of the questionnaire.

The state board of nursing, in each state and in the District of Columbia, maintains a file(s) consisting of the name, address, and license number of every RN who is currently licensed in that state. These files formed the basis for the identification of members of the target population and the selection of the sample.

Differing sampling rates were set for the states, based upon considerations of reliability of estimates and cost. Smaller states were assigned higher rates, but had smaller sample sizes, than larger states. The sample was selected independently and with equal probability of selection within states. The sampling rates and sample sizes are presented by state of licensure, in Exhibit 1.

Registered nurses were selected for inclusion in the sample on the basis of name, with an RN falling into the sample if her/his name fell within one of the clusters (called alpha segments) that defined sample membership for her/his high priority state. An alpha segment consists of all alphabetically adjacent names falling between boundaries determined in such a manner that each contains approximately the same number of all registered nurses in the United States. The alpha segments, already formed during the previous study, were constructed as follows. A systematic one-third sample of 372,926 names was selected from the alphabetically arranged 1972 inventory of names of registered nurses. This sample was sorted alphabetically by the nurses last name and then, within the sorted last name, by the first initial of the nurses first name. This sample was then divided into 250 nearly equal sized segments, always keeping the names in alphabetic order and making the break between two segments at a natural point. That is, making the boundary between two segments fall between two distinct names rather than between identical names. Each of the 250 alpha segments theoretically contains approximately 0.4 percent of all names of registered nurses in the United States. For the present study, 40 alpha segments were selected. The different sampling rates were achieved using various combinations of sub-clusters (called alphabetic portions) of the 40 selected alpha segments. The combinations of alphabetic portions that defined sample membership for the various states were "nested" in such a manner that an RN who was within the sample for a given state was also within the sample for all states with an equal or higher sampling rate. This feature of the Design is discussed further in Appendix B.

Because the sample was selected independently within the 51 states, some RNs who had more than one active license were selected more than once. Steps were taken to ensure that each sample RN was retained in the sample just once. Specifically, after all samples were selected they were combined into a single national sample file. This file was searched for duplicate listings. A total of 3,627 names were duplicates and were deleted from the sample before the questionnaires were mailed. Information obtained from returned questionnaires was used in a second stage of the unduplication process.

The established design of the registered nurse survey includes features that allow the addition and deletion of alpha segments for successive implementations. Under the design, the 40 sample alpha segments are randomly assigned to 5 panels of 8 alpha segments each. For each successive implementation of the design, a new panel, consisting of 8 new alpha segments would be entered into the sample replacing one of the 5 panels that was in the previous implementation. Under this scheme, if the survey were to be repeated annually,

Exhibit 1. Final Sampling Rate and Selections, by State of Licensure.

State	Final Sampling Rate (percent)	Final Duplicate Selections
Alabama	4.0	847
Alaska	12.0	367
Arizona	3.0	702
Arkansas	5.0	576
California	1.0	1636
Colorado	3.0	842
Connecticut	2.5	1149
Delaware	6.0	427
District of Columbia	5.5	319
Florida	1.5	1138
Georgia	2.5	892
Hawaii	6.0	530
Idaho	8.0	527
Illinois	1.5	1304
Indiana	2.5	799
Iowa	3.0	705
Kansas	4.0	748
Kentucky	3.0	776
Louisiana	4.0	859
Maine	5.0	588
Maryland	2.5	1100
Massachusetts	1.5	1609
Michigan	1.5	1158
Minnesota	2.5	1085
Mississippi	5.0	643
Missouri	2.5	893
Montana	8.0	593
Nebraska	5.0	800
Nevada	9.0	435
New Hampshire	5.0	563
New Jersey	1.5	1215
New Mexico	6.0	483
New York	1.0	1824
North Carolina	2.5	960
North Dakota	8.0	429
Ohio	1.5	1321
Oklahoma	5.0	748
Oregon	4.0	969
Pennsylvania	1.0	1728
Rhode Island	5.0	583
South Carolina	5.0	823
South Dakota	8.0	489

(continued)

Exhibit 1 (continued)

State	Final Sampling Rate (percent)	Final Duplicate Selections
Tennessee	3.0	879
Texas	1.5	1038
Utah	5.5	532
Vermont	8.0	540
Virginia	2.5	1071
Washington	2.5	911
West Virginia	5.0	668
Wisconsin	2.5	891
Wyoming	12.0	374
TOTAL		43,986

a nurse would be retained in the sample for 5 years. Exhibit 2 shows the pattern of rotation of panels into and out of the sample. Note that the first survey, in 1977, involved a reduced effort consisting of 3 rather than 5 panels.

Exhibit 2.* Panel Rotation Over Time

Survey Year	Panels							
	1	2	3	4	5	6	7	8...
1	X	X	X					
2	X	X	X	X	X			
3		X	X	X	X	X		
4			X	X	X	X	X	
5				X	X	X	X	X

*Adapted from: Westat, et al. (1976). "Sample Design for the National Survey of Registered Nurses," Volume I, pages 3-16.

C. Response Rate

Because of the potentially deleterious effect nonresponse can have upon estimates made from sample surveys, steps were taken to obtain as high a response rate as possible, given time and cost considerations. These steps included the mailing of a second and a third questionnaire to those sample members who had not returned a completed questionnaire. Finally, calls were made by telephone interviewers to a sample of those who remained nonrespondents after the third mailing. They were encouraged to return the questionnaire or to complete the questionnaire over the telephone. These followup procedures resulted in an effective response rate of 80.0 percent. Sample members who were determined to be deceased and those determined to be ineligible for the study (i.e., nonnurses, nurses who had no active licenses, nurses who changed their name causing them to fall outside the limits of the sample alpha segments) were treated as survey respondents so that an estimate of the number of such persons could be obtained. Details of the calculation of the response rate are presented in Exhibit 3. Response rates by assignment state (i.e., the RN's high priority state) are given in Exhibit 4. These response rates ranged from 68.9 for Alabama to 92.1 for Iowa.

Exhibit 3. Calculation of the Response Rate

Total Sample	39,573
Respondents	30,642
Nurses who returned completed questionnaires	30,535
Deceased nurses	66
Persons ineligible for the survey	41
Nonrespondents	7,667
Duplicates	1,264

Calculation of the response rate:

$$\frac{30,642}{39,573-1,264} = .800 \text{ or } 80.0 \text{ percent}$$

Exhibit 4. Response Rate by Initial Assignment State

State	Total Sample	Respondents	Non-respondents	Duplicates	Response Rate (%)
Total	39,573	30,642	7,667	1,264	80.0
Alabama	818	551	249	18	68.9
Alaska	364	287	70	7	80.4
Arizona	613	502	77	34	86.7
Arkansas	571	433	126	12	77.5
California	1,300	954	277	69	77.5
Colorado	773	616	107	50	85.2
Connecticut	1,092	754	303	35	71.3
Delaware	425	339	58	28	85.4
District of Columbia	318	263	46	9	85.1
Florida	1,029	724	241	64	75.0
Georgia	769	563	184	22	75.4
Hawaii	508	391	109	8	78.2
Idaho	508	420	55	33	88.4
Illinois	1,166	900	199	67	81.9
Indiana	828	698	114	16	86.0
Iowa	699	627	54	18	92.1
Kansas	705	546	128	31	81.0
Kentucky	741	578	139	24	80.6
Louisiana	810	582	219	9	72.7
Maine	585	467	99	19	82.5
Maryland	873	681	147	45	82.2
Massachusetts	1,304	887	382	35	69.9
Michigan	1,073	846	206	21	80.4
Minnesota	1,037	818	211	8	79.5
Mississippi	629	462	151	16	75.4
Missouri	787	636	135	16	82.5
Montana	578	479	93	6	83.7
Nebraska	783	671	95	17	87.6
Nevada	427	320	94	13	77.3
New Hampshire	492	417	52	23	88.9
New Jersey	1,149	845	252	52	77.0
New Mexico	478	364	107	7	77.3
New York	1,596	1,135	373	88	75.3
North Carolina	895	754	131	10	85.2
North Dakota	427	376	42	9	90.0
Ohio	1,114	959	107	48	90.0
Oklahoma	722	563	152	7	78.7
Oregon	929	701	207	21	77.2
Pennsylvania	1,298	1,050	205	43	83.7
Rhode Island	583	445	125	13	78.1
South Carolina	817	621	189	7	76.7
South Dakota	488	375	107	6	77.8

(continued)

Exhibit 4 (continued)

State	Total Sample	Respondents	Non-respondents	Duplicates	Response Rate (%)
Tennessee	820	561	234	25	70.6
Texas	946	674	233	39	74.3
Utah	509	385	112	12	77.5
Vermont	534	408	101	25	80.2
Virginia	986	772	193	21	80.0
Washington	792	665	102	25	86.8
West Virginia	640	510	110	20	82.3
Wisconsin	871	760	103	8	88.1
Wyoming	374	307	62	5	83.2

D. Weighting

Because the sample design for the National Sample Survey of Registered Nurses is a probability design, it permits the computation of unbiased estimates of characteristics of the target population. In order to make these unbiased estimates, sample weights are needed to reflect the complex design of the sample and to compensate for the potentially biasing effect of nonresponse to the survey. The weights are inflation factors such that the weight assigned to a sample nurse is the number of nurses in the target population that the nurse represents. Specifically, the weight for an RN is the reciprocal of the nurses probability of selection, adjusted to account for nonresponding nurses.

A nurse's unique link to the sampling frame was his or her license in the state with the highest sampling rate. Each nurse assigned (i.e., linked) to a particular state had an equal probability of being selected and, consequently, had equal weights. Weights were assigned to respondents in such a manner that the sum of the weights for all respondents assigned to a state was equal, approximately, to the state's total number of active licenses at the time the sample was drawn.

Once weights have been calculated all of an RN's states of licensure obtain equal status. That is, the RN's high priority state becomes irrelevant for determining his/her inclusion in a particular data tabulation.

E. Limitations

As is generally true of sample surveys, the sample design and survey procedures for this study were developed with the willingness to accept limitations imposed by certain features inherent in them. These features were adopted because they greatly facilitated the implementation of the suvey and because the limitations they impose are tolerable.

A degree of undercoverage is one feature of the study. Recall that the target population consists of all registered nurses in the country who had an active license at the time the sample was selected. Under coverage occurs when some such nurses are not on the sampling frame. These nurses would then have zero probability of being selected for the sample and so the survey results would, in effect, not include them. The possibility of undercoverage exists because of the variation in the currentness of the individual states files of licensed RNs. The extent of undercoverage is believed to be negligible for this study.

The sample nurses for this study were not selected independently. Instead, clusters of nurses were selected, where a cluster, called an alpha segment, consists of all those RNs whose names fall within a particular section of an alphabetized list of the names of all such nurses. This feature of the design, as well as its use in conjunction with the "nested" selection of the alpha segments, will tend to increase the sampling error of estimates of characteristics that are highly correlated with last name. Ethnicity is an example of such a characteristic. It has been illustrated that only moderate increases in sampling errors result from the use of such alphabetic clustering [Refs. 4 and 5]. Note that it is generally true that sampling of clusters of individuals, as opposed to sampling of individuals, tends to increase sampling variability. A good discussion of this point is given on pages 73-78 of Reference 6.

Another feature of the design which increases sampling errors is a differential weighting scheme. Weights for the sample RNs were based upon the differing sampling rates and response rates for the states. Differing sampling rates, which account for most of the differential weighting, were adopted because state-by-state estimates were desired. Recall that the sampling weights are defined to be the reciprocal of the RN's selection probabilities, adjusted to account for nonrespondents. Consequently the smaller a state's sample, in relationships to its total number of RNs, the smaller will be its sampling rate and the larger will be its weight. Large differences in the total number of registered nurses for different states made the alternative of adopting a single sampling rate for all states infeasible. The effect of differential weighting is proportionately greatest for national level estimates where the large sample size makes it most tolerable. Reference 7 contains, beginning on page 205, a good discussion of the effect of unequal weighting upon the sampling variability of estimates. Variances of estimates for a small state can be critical if a large proportion of its nursing supply is not licensed there. This is known to be true for Alaska, so the estimates for its nursing supply are of relatively low reliability.

Another limitation involves estimates based upon a small number of respondents. Since the sampling error of an estimate is dependent upon sample size, with larger errors for smaller sample sizes, the reliability of such estimates can be low. Appendix C contains a discussion of the sampling errors and the nonsampling errors (bias) associated with this study. Appendix D contains standard errors for selected characteristics of the registered nurse population.

III. SUMMARY OF FINDINGS

The Bureau of health Professions within the Health Resources Administration implemented through its contractor, the Research Triangle Institute, a national sample survey of registered nurses. The purpose of the survey was to obtain and provide indepth statistics on the registered nurse population. Data were obtained on 30,375 nurses which represent a 80.0 percent response rate. The questionnaire requested data on the status of the nurse as of November 1980.

A. Demographic Characteristics

In November 1980, the registered nurse population was an estimated 1.66 million nurses. The nurse population was predominately female (96.4 percent) and white (91.5 percent). The number and percentage of male and minority nurses has increased over the 1977 reported values. Most of the nurses were married (70.6 percent) and 27.4 percent of the married nurses had children under 6 at home.

The basic nursing education of most nurses (63.2 percent) was obtained through a diploma program. This was down from the 75 percent reported in 1977. This is almost a 12 percent change in 3 years. In recent years, a higher percentage of recently trained nurses had obtained their basic nursing education through the associate and baccalaureate degree program than through the diploma.

Though most nurses had only one license, a significant percent (19.2 percent) had two or more. Nurses with advanced degrees were more likely to have multiple licenses than were nurses with associate degrees or who received their educational preparation through a diploma program.

Of the 1.66 million nurses, 1.27 million were employed in nursing (76.6 percent). Nurses who indicated they had not married had the highest percentage of nurses employed in nursing. Married nurses who had some children at home that were under 6 years of age and also some that were 6 or older had the lowest percentage of nursing employment. The younger nurses had the highest percentage of nurses participating in the labor force as nurses, while the older nurses had the lowest.

B. Educational Preparation

The trend away from diploma preparation toward associate degree and baccalaureate degree programs has continued. Three-fourths of the graduates since 1977 were prepared in associate degree or baccalaureate degree programs. Consequently, the total proportion of diploma nurses has dropped to 63 percent while nurses who obtained their basic nursing education from associate degree and baccalaureate programs have risen to 19 and 17 percent respectively.

An increase was noted in the 1980 survey in the percent of nurses who continued their formal education beyond the basic nursing education level. Fifteen percent or 255,682 of the nurse population had additional degrees in 1980 while in 1977 the percentage was 12 percent.

Although basic education remains the highest preparation for the majority of nurses, 14 percent (or 147,530) of diploma nurses and 13 percent (or 289,585) of the baccalaureate nurses obtained additional degrees. Only 9 percent (or 27,386) of associate degree nurses received an additional degree. The distribution of nurses by their highest educational preparation is as follows: 903,132 (or 54.3 percent) had diplomas; 295,318 (17.8 percent) had associate degrees; 367,816 (22.1 percent) had baccalaureate degrees; and 85,860 (5.2 percent) had masters degrees or higher educational preparation. The highest educational preparation was not known for 10,258 nurses (0.6 percent).

For those 85,860 nurses with masters or doctorates, 41.9 percent had clinical practice as their primary focus. Another one third focused on education and 17.3 percent trained in administration.

Approximately 10 percent or 167,230 of the nation's nurses were in school at the time of the survey and most of these nurses (70.0 percent or 117,014 nurses) were in baccalaureate programs. Nine out of every 10 nurses currently enrolled in an academic program were employed in nursing, and, of those, three-fourths were full-time employees. Over 80 percent of the nurses were enrolled in school on a part-time basis. Personal savings and earnings from employment were the primary sources of financial support for the nurses continuing their education.

More than 70 percent or 1,167,840 of all licensed nurses participated in continuing education during the year prior to the survey.

C. Employment Characteristics of Registered Nurses Employed in Nursing as of November 1980

From 1977 to 1980, the RNs employed in nursing increased by over one-quarter million, from 978,234 to 1,272,852. In addition to a greater absolute number of RNs, a larger proportion of nurses licensed in 1980 (76.6 percent) were employed in nursing than in 1977 (69.8 percent).

Nearly two-thirds (65.7 percent or 835,647 RNs) of all nurses employed in nursing were employed in a hospital. Nursing home or extended care service settings accounted for the next largest proportion (8.0 percent), followed by public/community health settings (6.6 percent) and physician's or dentist's office settings (5.7 percent).

Of the RNs employed in nursing, 3.1 percent (39,138) of the nurses were employed principally and/or secondarily through a temporary employment service. Of these, approximately one-half were employed only secondarily through a temporary employment service.

Of the nurses employed in nursing, 824,844, or 64.8 percent, had the title of staff, charge, or general duty nurse. Seven percent had the title of head nurse or assistant head nurse.

D. Employment Conditions of Employed Nurses

Full-time employed nurses worked an average of 2,032 hours per year and part-time nurses averaged 1,037 annual hours. Nurses who were employed full-time by occupational health programs, hospitals and extended care facilities/ nursing homes tended to work more hours per year than did nurses in other employment categories.

The average full-time annual earnings from the nurse's principal position was $17,394 for 1980. Nurses in the Pacific census division had the highest average annual salaries ($19,887), while those in the East-South-Central census division had the lowest ($16,378). Those nurses with doctorates earned more ($27,702)than those with masters degrees in nursing ($21,889), who in turn earned more than those with baccalaureates in nursing ($17,436). Those with associate degree, diploma and baccalaureate in nursing were within a $1,000 per year of each other.

Nurses employed full-time with more than one nursing position average higher annual incomes than did those with only one position. About 42.3 percent of the nurses with additional positions earned over $20,000 annually from all positions as compared to one quarter (24.6 percent) of nurses with one job who were in that range.

Only one-third of the nurses indicated that they carried malpractice insurance exclusive of that which their employer carried. Self-employed nurses and nurse educators had high rates of personal coverage. Hospital nurses and nursing home/extended care facility nurses had lower rates of protection. Nurses who spent more than half of their time in direct patient care had a lower rate of personal coverage than did nurses who were primarily administrators or educators.

E. Nurses Not Employed in Nursing

There were 388,537 nurses or 23.4 percent of the nurse population not employed in nursing. Of the nurses not employed in nursing about 19.5 percent (75,665 nurses) were employed in other jobs.

Only 8.4 percent or 32,784 of the nurses not employed in nursing were actively seeking nursing employment and less than 8,900 nurses were seeking full-time employment. Over half the nurses seeking employment (17,051 nurses) had been looking for 4 weeks or less. Compared to 1977 survey results the number and percentage of nurses actively seeking employment was less in 1980.

IV. CHARACTERISTICS OF THE NURSE POPULATION

In this chapter the registered nurse population is described in terms of demographic chracteristics, educational background, employment status of nurses employed in nursing, and characteristics of nurses not employed as nurses. Each section contains a discussion of the topic with textual exhibits and a set of related detailed tables in the back of the section.

A. Demographic Characteristics

Based on the 1980 Sample Survey of Registered Nurses, there were 1.66 million individuals located in the United States on November 15, 1980 who had current licenses to practice as registered nurses. In this section the characteristics of these nurses are described in terms of their age, race, sex, marital status, licensure, and their general educational background and employment status. Greater detail is provided on the nurses educational background and employment status in later sections.

1. Age

The age profile of the 1.66 million nurses who had current licenses in 1980 is shown in Exhibit 5, along with the distribution of nurses in 1977 and the percent of the U.S. female population who were nurses in 1980. The percentage of nurses in any age group, except for those less than 25 years of age, is highest for the younger ages and decreases as the age increases. In comparing the 1977 and 1980 age distribution of nurses it can be observed there is a higher percentage of nurses at the younger ages in 1980.

Comparing the nurses as a percentage of the 1980 female population shows the percentage stays relatively constant at approximately 2.95 (±.08) between the ages of 25 and 45. Thereafter it steadily declines, indicating that the registered nurse population decreases at a greater rate with age than the U.S. female population as a whole.

Looking at the those nurses under 25 years old on a yearly basis, rather than in the 5-year groups, indicates an increasing percentage of nurses with age. This is as one would expect since most nurses obtain the first licenses during this age period.

2. Sex

The registered nurse population in 1980 was still overwhelmingly female, with 1,603,069 (96.4 percent) of the population being female and 45,060 (2.7 percent) being male. The sex was not known for the remaining 0.9 percent of the nurses. This figure represents an increase of 18,069 in male nurses over the 1977 estimate when they constituted 1.9 percent or 26,991 of the registered nurse population. Though the male nurse population is still small it has increased substantially since 1977.

Exhibit 5. Age Profile of Registered Nurses as of November 1980

Age of RN	RNs in Age Group 1980 Number	Percent	Cumulative Percent	Percent of RNs in Age Group, 1977	RNs as a Percent of U.S. Female Population in 1980[2]
Less Than 20	133	0.0[1]	0.0[1]	-	-
20-24	128,422	7.7	7.7	6.3	1.21
20	1,941	0.1			
21	11,263	0.7			
22	28,632	1.7			
23	40,594	2.4			
24	45,992	2.8			
25-29	289,777	17.4	25.2	16.1	2.95
30-34	255,400	15.4	40.5	14.3	2.88
35-39	205,979	12.4	52.9	12.7	2.90
40-44	180,327	10.9	63.8	11.4	3.03
45-49	150,087	9.0	72.8	9.4	2.63
50-54	137,154	8.3	81.0	10.3	2.25
55-59	124,613	7.5	88.5	7.4	2.03
60-64	81,485	4.9	93.4	5.4	1.50
65 & Over	74,270	4.5	97.9	5.8	.49
Age not known	34,737	2.1	100.0	1.0	-
Total	1,662,383	100.0			

[1] Less than 0.05%.

[2] 1980 Census of the Population, U.S. Department of Commerce, Bureau of the Census.

NOTE: -Because of rounding, sums of the estimated percents may not add to totals.

-Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

3. Race

Approximately 91.5 percent or 1,521,754 of the nurses were white (not of Hispanic origin), 7.2 percent or 119,512 were of other racial or ethnic backgrounds, and 1.3 percent did not report race. The minority nurses included 60,845 blacks (not of Hispanic origin), 33,601 Asians or Pacific Islanders, 20,816 Hispanics, and 4,249 American Indians or Alaskan Natives. In 1977 it was estimated that 87,386 or 6.2 percent of the nurses were minorities; thus it appears that the proportion, as well as the absolute number of nurses who are nonwhite, has increased over the intervening 3 years.

4. Marital Status

Almost 1.2 million nurses were married (70.6 percent) as indicated in Exhibit 6. Of those married, 27.4 percent had children under 6 years of age at home. About 72.0 percent of the married nurses had no children at home or no children under 6 years of age at home. For the remaining married nurses the status of children was not known. Nurses who had never married constituted 14.8 percent or 246,409 of the nurse population while 229,247 (13.8 percent) were widowed, divorced or separated.

The median age of the nurses who had not married was 28 years. This is significantly lower than the median age of the married nurse (38 years) and of the nurses who were widowed, divorced or separated (46 years).

5. Education

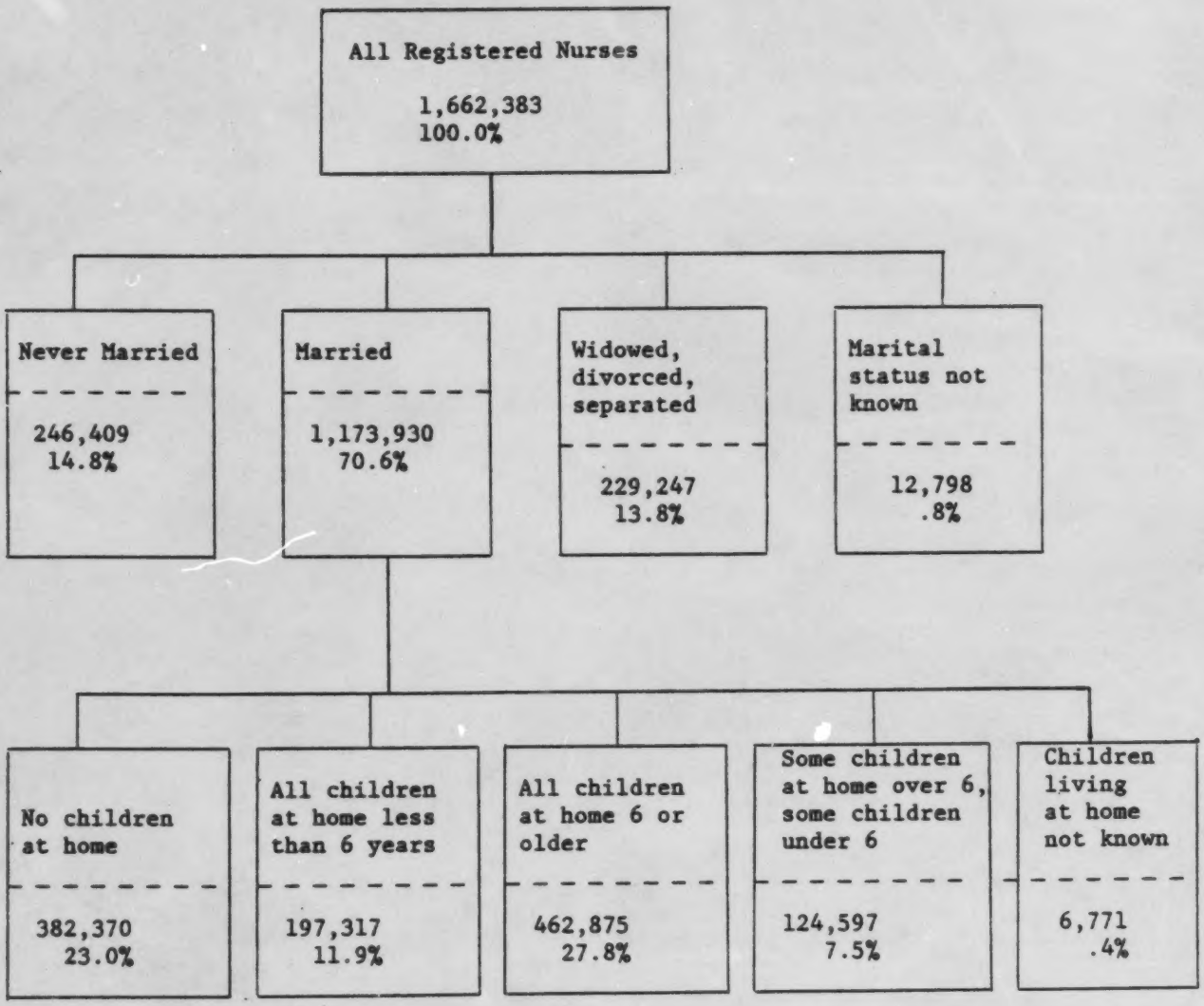
Over 1.05 million nurses (63.2 percent) obtained their basic nursing education through a diploma program. An additional 18.6 percent of the nurses (308,616) received their basic nursing education from an associate degree program, while 17.4 percent (289,585) received their basic nursing education through a baccalaureate or higher degree program. The type of basic nursing education received is not known for 0.8 percent of the nurses. Compared to the 1977 survey results, the proportion of the nursing population with their basic education in a diploma program dropped from 75 to 63 percent, while nurses whose initial education was through the associate degree program increased from 11 percent in 1977 to 19 percent in 1980. Those nurses with a baccalaureate or higher degree for their basic education increased from 14 to 17 percent.

A higher proportion of newly graduated nurses obtained their basic nursing education through the associate and baccalaureate degree programs than nurses educated previously. For example, of the 77,999 nurses who obtained their first license in 1979, 43.0 percent were from associate degree programs, 31.9 percent were from baccalaureate or masters degree programs, and 24.5 percent were from diploma programs. The type of basic nursing education was not known for 0.6 percent of the nurses first licensed in 1979.

6. Licensure

Over four out of five RNs (80.8 percent) had only one license. Nurses with two licenses accounted for 16.6 percent of the RNs, and those with three licenses made up 2.2 percent of the RN population. Those nurses with more than three licenses accounted for only 0.5 percent.

Exhibit 6. Marital Status of All RNs



The higher the educational preparation, the larger the percentage of nurses with multiple licenses was likely to be. Of the estimated 4,108 nurses with a doctorate, it was estimated that 41.4 percent had multiple licenses, while 33.5 percent of the 55,055 nurses with Masters degrees in nursing had licenses in more than one state and 21.5 percent of the nurses with baccalaureate degrees in nursing had more than one license. The 295,318 associate degree nurses had the smallest percentage of nurses with multiple licenses (15.9 percent) while 18.2 percent of the 903,132 nurses whose highest educational preparation was from diploma programs were licensed in multiple states.

7. Employment Status

Exhibit 7 indicates the employment status of the 1.66 million registered nurses. About 76.6 percent or 1,272,852 of the registered nurses were employed in nursing with one-half of the total RN population being employed full-time. Most of the RNs not employed in nursing indicated they were not currently employed in any occupation. Less than 5 percent (75,665 nurses) of the nurses were employed in nonnursing jobs.

The number and percent of nurses employed in nursing by marital status is shown in Exhibit 8. The 864,129 married nurses employed in nursing represented 67.9 percent of all the nursing work force. Those employed as nurses that never married made up 17.1 percent or 218,212 of the nurses working as nurses. The number of widowed, divorced or separated nurses that were working as nurses was 180,825 or 14.2 percent of the nurses employed in nursing.

Also shown in Exhibit 8 is the number and percent of married nurses that were employed as nurses by the presence of children. Of the 864,129 married nurses employed as nurses, 275,962 had no children at home, 149,533 had children at home all of which were less than 6 years old, 347,058 had children at home all of which were 6 or older and 88,103 had children at home which included some under 6 years of age and some 6 or older.

A question that occasionally arises is the effect of marital status and children (particularly children under 6 years of age) on nurses' participation in the labor force. Exhibit 9 indicates the percentage of nurses within a marital status category that were employed as nurses (referred to as activity rate). The activity rate for all nurses was 76.6. The nurses who were never married and those who were widowed, divorced, or separated had an activity rate higher than that for all nurses, while the married nurses with some children less than 6 years of age and some 6 or older had the lowest activity rate. Of the married nurses, those with children less than 6 years old living at home had the highest activity rate.

The proportions of nurses employed as nurses as a function of age, i.e., age specific activity rates, are shown in Exhibit 10. The percentage of nurses who were employed as nurses was highest for the younger nurses and then dropped off and stayed relatively constant at 77.8 (±0.6) through age group 35-49. After 50 years of age, the activity rate drops rapidly.

Exhibit 7. Employment Status of RNs

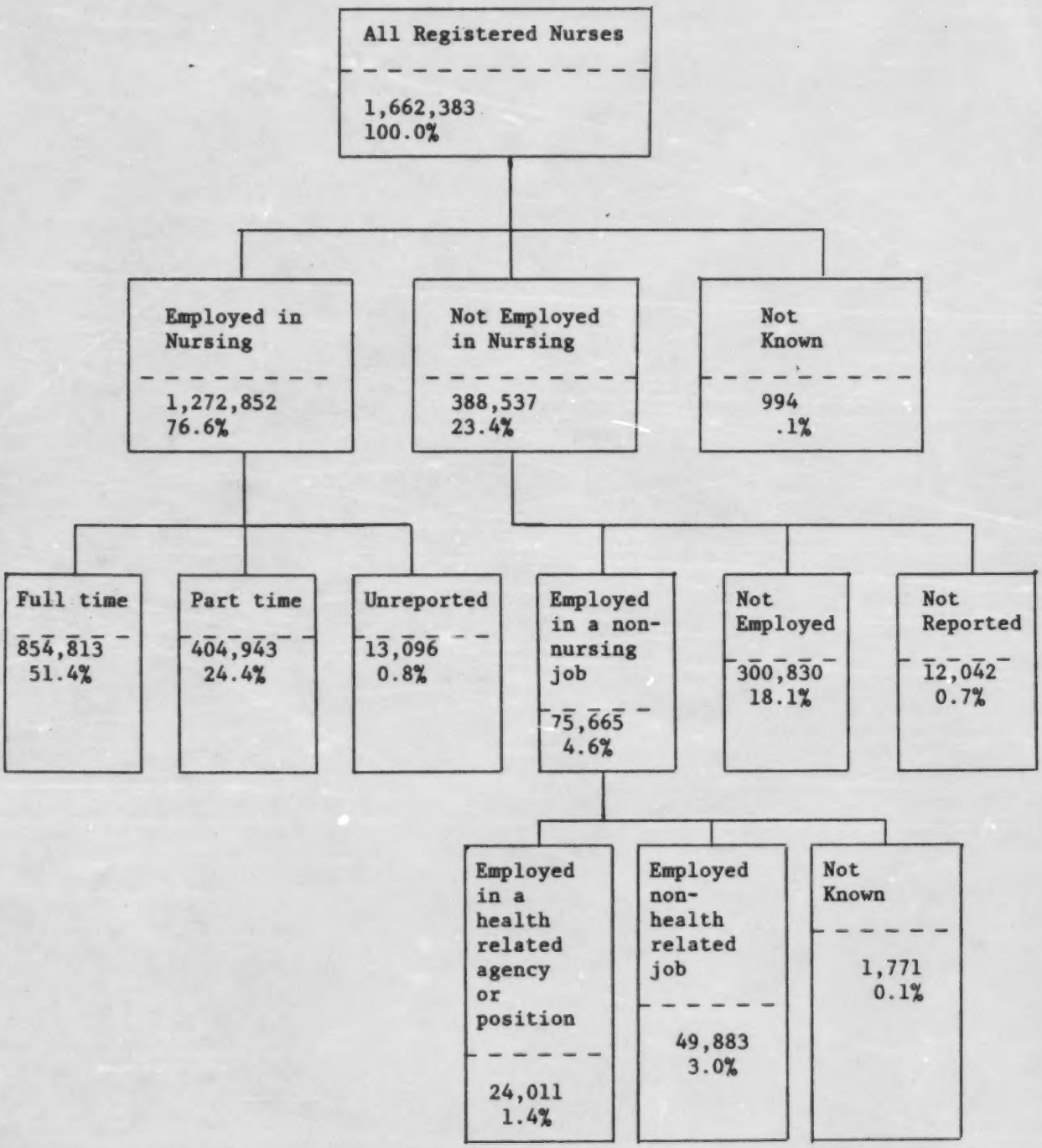


Exhibit 8. Number and Percent of All Nurses Employed in Nursing by Marital Status

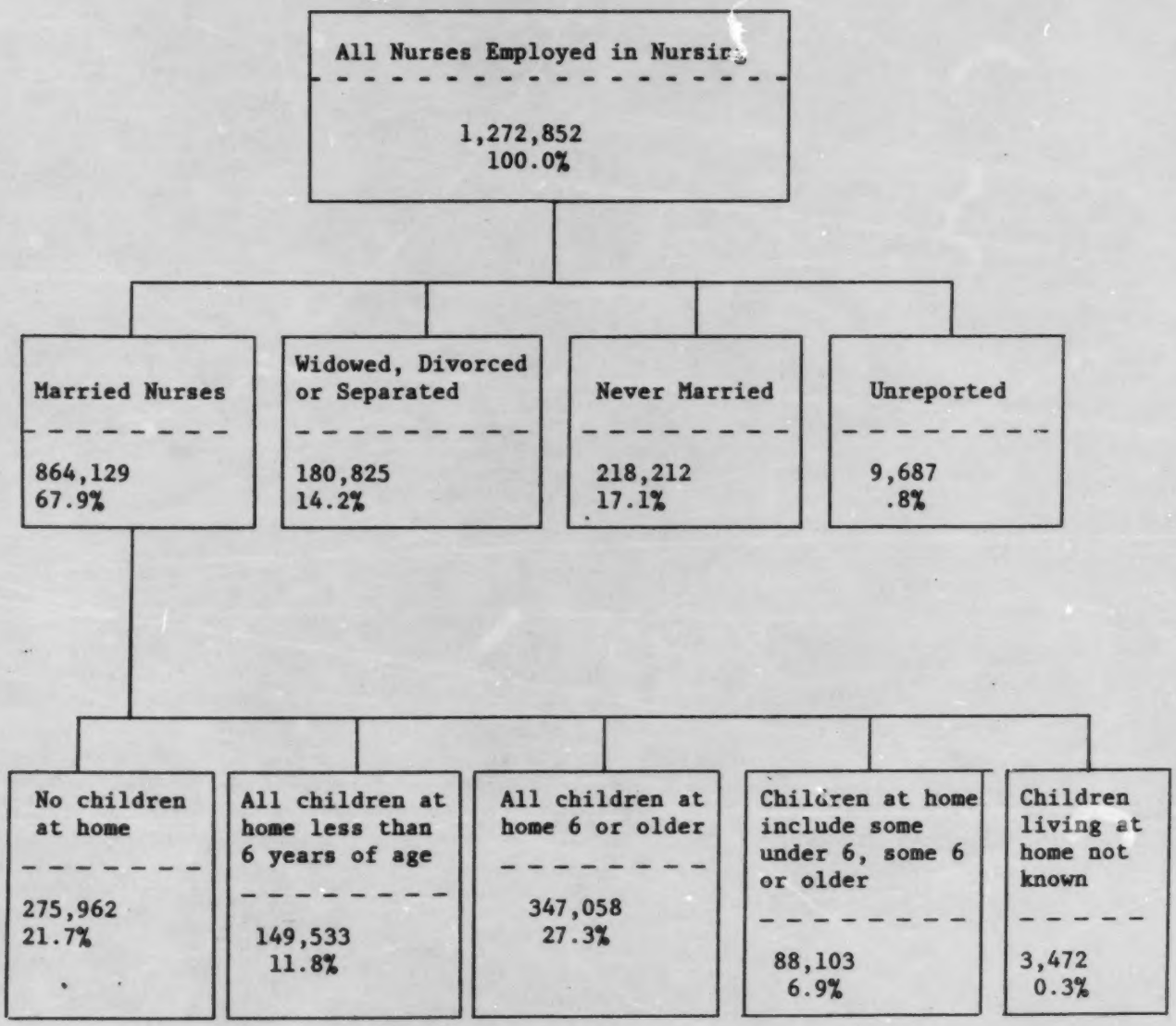


Exhibit 9. Activity Rate by Marital Status

Marital Status	Number of Nurses Employed in Nursing	Activity Rate
All Nurses	1,272,852	76.6
Married Nurses	864,129	73.6
No children at home	275,962	72.2
All children at home less than 6	149,533	75.8
All children at home 6 or older	347,058	75.0
Children at home include some under 6 and some 6 or older	88,103	70.7
Children at home not known	3,472	51.3
Widowed, Divorced or Separated	180,825	78.9
Never Married	218,212	88.6
Marital Status Not Known	9,687	80.0

Note: Includes only registered nurses actively licensed in November 1980 who worked in the U. S., if employed in nursing, or lived in the U. S. if not employed in nursing.

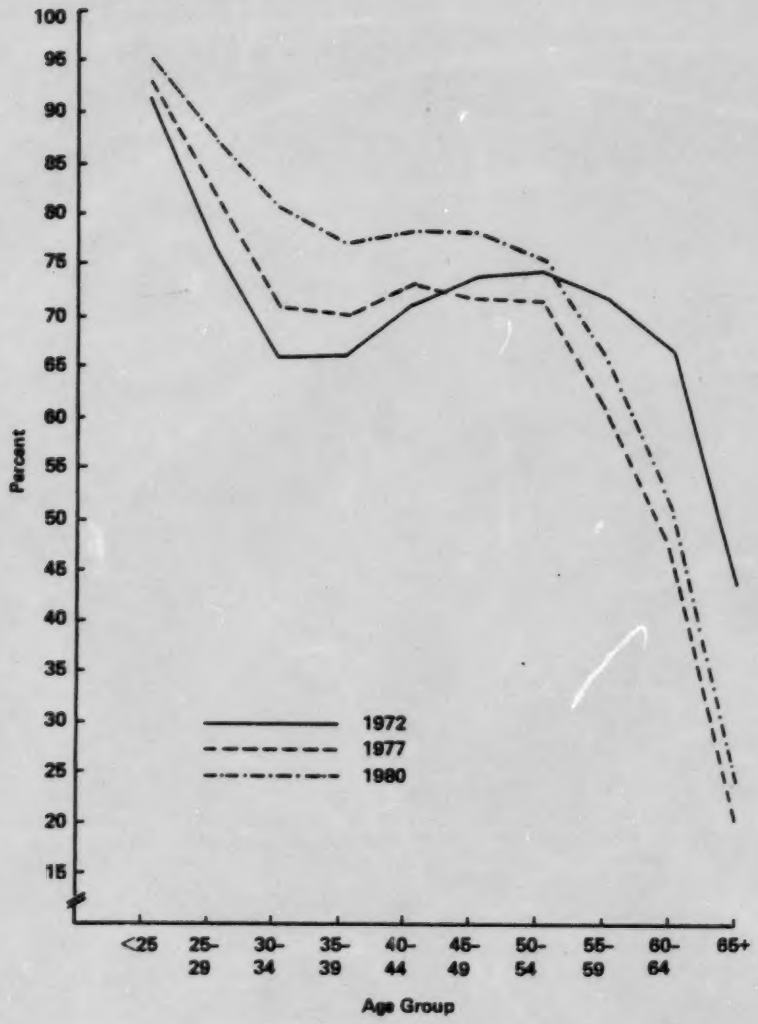
Exhibit 10. Activity Rate by Age Group

Age	Number of Nurses Employed in Nursing	Activity Rates
All Nurses	1,272,852	76.6
Less than 25	122,354	95.2
25 to 29	254,138	87.7
30 to 34	206,097	80.7
35 to 39	159,025	77.2
40 to 44	141,459	78.4
45 to 49	117,467	78.3
50 to 54	102,987	75.1
55 to 59	83,003	66.6
60 to 64	41,791	51.3
65 or Over	18,657	25.1
Age Not Known	25,874	76.0

Note: Includes only registered nurses actively licensed in November 1980 who worked in the U. S., if employed in nursing, or lived in the U. S. if not employed in nursing.

A comparison of activity rates by age groups with earlier results is shown in Exhibit 11. The 1980 results show a higher percentages of the nurses employed in nursing for all age groups than does the 1977 survey. It was also higher than the activity rate based on the 1972 inventory up through age group 50-54 where it then changes over and stays lower.

Exhibit 11. Estimated Percentage of Registered Nurses Employed in Nursing by Age Group, 1972[1], 1977[2], and 1980.



[1]American Nurses' Association, The Nation's Nurses: 1972 Inventory of Registered Nurses. Adjusted for nonresponse to employment status.

[2]Roth, Aleda, Deborah Graham and Gordon Schmittling, 1977 National Sample Survey of Registered Nurses, 1977.

DEMOGRAPHIC CHARACTERISTIC TABLES

TABLE 1. Age, Race and Sex of All Registered Nurses, November 1980

Age	Total				White				Black and Other				Race Not Known			
	Total	Female	Male	Sex Not Known	Total	Female	Male	Sex Not Known	Total	Female	Male	Sex Not Known	Total	Female	Male	Sex Not Known
a. National Estimate																
Total	1,662,383	1,603,069	45,060	14,254	1,521,754	1,475,591	40,429	5,734	119,512	114,571	4,332	609	21,118	12,907	299	7,912
Less than 25	128,554	125,370	3,102	83	122,244	119,122	3,040	83	5,576	5,514	62	0	734	734	0	0
25-29	289,777	276,213	13,137	427	270,004	257,395	12,181	427	18,529	17,574	955	0	1,244	1,244	0	0
30-34	255,400	243,545	11,277	579	229,726	218,742	10,597	387	24,200	23,468	633	100	1,474	1,336	47	91
35-39	205,979	200,312	5,190	476	185,054	180,305	4,497	251	19,984	19,166	643	175	941	841	50	50
40-44	180,327	176,221	3,712	394	164,059	160,509	3,207	342	15,331	14,858	422	52	936	854	83	0
45-49	150,087	146,826	2,777	485	135,922	133,331	2,106	485	13,046	12,374	671	0	1,120	1,120	0	0
50-54	137,154	135,101	1,716	337	127,105	125,491	1,446	167	8,432	7,992	270	170	1,618	1,618	0	0
55-59	124,613	122,673	1,374	561	118,695	117,165	1,090	440	4,920	4,632	288	0	998	876	0	121
60-64	81,485	79,873	931	681	77,537	76,300	713	524	2,492	2,236	218	38	1,456	1,337	0	119
65 and over	74,270	72,224	1,144	902	70,111	68,185	1,024	902	2,719	2,719	0	0	1,440	1,320	120	0
Age Not Known	34,737	24,711	698	9,329	21,298	19,045	528	1,725	4,282	4,039	169	73	9,157	1,626	0	7,531
b. Percent																
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 25	7.7	7.8	6.9	0.6	8.0	8.1	7.5	1.4	4.7	4.8	1.4	0	3.5	5.7	0	0
25-29	17.4	17.2	29.2	3.0	17.7	17.4	30.1	7.5	15.5	15.3	22.1	0	5.9	9.6	0	0
30-34	15.4	15.2	25.0	4.1	15.1	14.8	26.2	6.8	20.3	20.5	14.6	16.5	7.0	10.4	15.8	1.1
35-39	12.4	12.5	11.5	3.3	12.2	12.2	11.1	4.4	16.7	16.7	14.9	28.8	4.5	6.5	16.6	0.6
40-44	10.9	11.0	8.2	2.8	10.8	10.9	7.9	6.0	12.8	13.0	9.7	8.5	4.4	6.6	27.6	0
45-49	9.0	9.2	6.2	3.4	8.9	9.0	5.2	8.5	10.9	10.8	15.5	0	5.3	8.7	0	0
50-54	8.3	8.4	3.8	2.4	8.4	8.5	3.6	2.9	7.1	7.0	6.2	27.9	7.7	12.5	0	0
55-59	7.5	7.7	3.1	3.9	7.8	7.9	2.7	7.7	4.1	4.0	6.7	0	4.7	6.8	0	1.5
60-64	4.9	5.0	2.1	4.8	5.1	5.2	1.8	9.1	2.1	2.0	5.0	6.3	6.9	10.4	0	1.5
65 and over	4.5	4.5	2.5	6.3	4.6	4.6	2.5	15.7	2.3	2.4	0	0	6.8	10.2	39.9	0
Age Not Known	2.1	1.5	1.6	65.5	1.4	1.3	1.2	30.1	3.6	3.5	3.9	12.0	43.4	12.6	0	95.2

TABLE 1 (cont.)

Age	Total				White				Black and Other				Race Not Known			
	Total	Female	Male	Sex Not Known	Total	Female	Male	Sex Not Known	Total	Female	Male	Sex Not Known	Total	Female	Male	Sex Not Known
c. Sample																
Total	30,375	29,275	824	276	28,018	27,151	756	111	1,950	1,874	64	12	407	250	4	153
Less than 25	2,393	2,336	56	1	2,271	2,216	54	1	111	109	2	0	11	11	0	0
25-29	5,573	5,323	242	8	5,214	4,979	227	8	336	321	15	0	23	23	0	0
30-34	4,707	4,470	228	9	4,302	4,080	215	7	376	363	12	1	29	27	1	1
35-39	3,774	3,662	102	10	3,447	3,352	90	5	304	289	11	4	23	21	1	1
40-44	3,221	3,152	61	8	2,969	2,908	54	7	236	229	6	1	16	15	1	0
45-49	2,751	2,697	43	11	2,516	2,471	34	11	210	201	9	0	25	25	0	0
50-54	2,472	2,443	25	4	2,305	2,280	23	2	139	135	2	2	28	28	0	0
55-59	2,248	2,214	23	11	2,138	2,109	20	9	86	83	3	0	24	22	0	2
60-64	1,424	1,396	15	13	1,353	1,330	13	10	46	43	2	1	25	23	0	2
65 and over	1,199	1,165	17	17	1,130	1,097	16	17	41	41	0	0	28	27	1	0
Age Not Known	613	417	12	184	373	329	10	34	65	60	2	3	175	28	0	147

NOTES: - Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

- Because of rounding, sums of estimated numbers and percents may not add to totals.

DEMO. CHAR. 2A. MARITAL STATUS BY GROUP AGE

TABLE 2. Marital and Children Status of All Registered Nurses by Age, November 1980

Marital Status	Total	Age										
		Less than 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and Over	Not Reported
a. National Estimate												
Total	1,662,383	128,554	289,777	255,400	205,979	180,327	150,087	137,154	124,613	81,485	74,270	34,737
Married with all children at home under 6	197,317	15,136	102,962	63,535	10,824	2,478	463	137	0	42	0	1,739
Married with all children at home 6 or older	462,875	603	6,482	41,488	104,919	118,032	89,672	55,658	29,138	8,610	1,714	6,559
Married with children at home over and under 6	124,597	221	11,226	58,616	37,025	10,637	3,022	958	636	460	189	1,608
Married, no children at home	382,370	43,141	78,170	30,137	10,524	12,972	24,054	44,882	59,324	41,922	29,809	7,436
Married, children status not known	6,771	275	221	230	74	504	588	489	838	1,432	1,919	200
Widowed, divorced, separated	229,247	3,433	19,407	29,089	25,066	24,072	23,324	23,511	24,822	21,377	29,622	5,526
Never married	246,409	65,485	70,684	31,572	17,030	11,331	8,683	11,151	9,338	7,229	10,458	3,450
Not Reported	12,798	260	625	734	516	302	281	368	517	414	561	8,220
b. Percent												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married with all children at home under 6	11.9	11.8	35.5	24.9	5.3	1.4	0.3	0.1	0.0	0.1	0.0	5.0
Married with all children at home 6 or older	27.8	0.5	2.2	16.2	50.9	65.5	59.8	40.6	23.4	10.6	2.3	18.9
Married with children at home over and under 6	7.5	0.2	3.9	23.0	18.0	5.9	2.0	0.7	0.5	0.6	0.3	4.6
Married, no children at home	23.0	33.6	27.0	11.8	5.1	7.2	16.0	32.7	47.6	51.5	40.1	21.4
Married, children status not known	0.4	0.2	0.1	0.1	*	0.3	0.4	0.4	0.7	1.8	2.6	0.6
Widowed, divorced, separated	13.8	2.7	6.7	11.4	12.2	13.4	15.5	17.1	19.9	26.2	39.9	15.9
Never married	14.8	50.9	24.4	12.4	8.3	6.3	5.8	8.1	7.5	8.9	14.1	9.9
Not Reported	0.8	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.4	0.5	0.8	23.7

* Less than .05 percent.

TABLE 2 (cont.)

Marital Status	Total	Age										
		Less than 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and Over	Not Reported
c. Sample												
Total	30,375	2,393	5,573	4,707	3,774	3,221	2,751	2,472	2,248	1,424	1,199	613
Married with all children at home under 6	3,849	300	2,062	1,184	214	44	9	3	0	1	0	32
Married with all children at home 6 or older	8,350	11	123	796	1,927	2,131	1,644	953	486	131	28	120
Married with children at home over and under 6	2,312	5	234	1,060	689	205	50	17	11	8	4	29
Married, no children at home	7,007	837	1,456	536	189	228	474	837	1,099	738	494	119
Married, children status not known	116	6	3	4	3	7	10	11	16	21	30	5
Widowed, divorced, separated	4,146	71	386	561	460	407	396	445	455	402	475	88
Never married	4,349	1,159	1,296	552	284	194	162	196	174	115	158	59
Not Reported	246	4	13	14	8	5	6	10	7	8	10	161

NOTES: - Includes only registered nurses actively licensed in November 1978 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

- Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

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TABLE 3. Number of Licenses Held by Registered Nurses by Age, November 1980

Number of Licenses	Total	Age										
		Less than 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and Over	Not Reported
a. National Estimate												
Total	1,662,383	128,554	289,777	255,400	205,979	180,327	150,087	137,154	124,613	81,485	74,270	34,737
1	1,342,439	109,030	229,557	201,715	163,221	143,102	121,016	112,982	102,907	65,812	64,863	28,235
2	275,556	18,114	51,796	45,156	36,262	32,298	25,505	20,424	18,524	13,971	8,206	5,300
3	37,030	1,309	6,991	7,182	5,739	4,029	2,730	3,128	2,649	1,384	887	1,004
4 and over	7,358	102	1,433	1,347	756	898	837	621	533	319	315	198
b. Percent												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1	80.8	84.8	79.2	79.0	79.2	79.4	80.6	82.4	82.6	80.8	87.3	81.3
2	16.6	14.1	17.9	17.7	17.6	17.9	17.0	14.9	14.9	17.2	11.1	15.3
3	2.2	1.0	2.4	2.8	2.8	2.2	1.8	2.3	2.1	1.7	1.2	2.9
4 and over	0.5	0.1	0.5	0.5	0.4	0.5	0.6	0.5	0.4	0.4	0.4	0.6
c. Sample												
Total	30,374	2,393	5,573	4,707	3,774	3,221	2,751	2,472	2,248	1,424	1,199	613
1	22,970	1,915	4,095	3,447	2,767	2,399	2,094	1,927	1,749	1,105	1,013	459
2	6,216	436	1,237	1,039	841	685	554	448	421	278	155	122
3	979	40	199	184	146	113	75	81	61	31	23	26
4 and over	210	2	42	37	20	24	28	16	17	10	8	6

NOTES: -Includes only registered nurses actively licensed in November 1980 who worked in the United States if employed in nursing or lived in the United States if not employed in nursing.

-Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

TABLE 4. Number of Licenses Held by Highest Nursing Educational Preparation, November 1980

Number of Licenses	Total	Highest Nursing Educational Preparation							
				Baccalaureate		Masters			
		Diploma	Associate Degree	In Nursing	Nursing Related	In Nursing	Nursing Related	Doctorate	Not Known
a. National Estimate									
Total	1,662,383	903,132	295,318	326,320	41,496	55,055	26,697	4,108	10,258
1	1,342,439	738,317	248,456	256,333	32,216	36,629	19,492	2,408	8,588
2	275,556	143,339	41,446	60,175	7,935	14,447	5,532	1,267	1,415
3	37,030	17,897	4,586	8,541	1,095	2,937	1,422	329	223
4 and over	7,359	3,578	829	1,270	251	1,042	251	105	32
b. Percentage									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1	80.8	81.8	84.1	78.6	77.6	66.5	73.0	58.6	83.7
2	16.6	15.9	14.0	18.4	19.1	26.2	20.7	30.8	13.8
3	2.2	2.0	1.6	2.6	2.6	5.3	5.3	8.0	2.2
4 and over	0.5	0.4	0.3	0.4	0.6	1.9	0.9	2.6	0.3
c. Sample									
Total	30,375	16,278	5,528	6,206	663	1,001	450	69	180
1	22,970	12,548	4,335	4,563	461	599	292	33	139
2	6,216	3,176	1,033	1,372	164	300	113	24	34
3	979	456	138	229	29	77	35	9	6
4 and over	210	98	22	42	9	25	10	3	1

NOTES: -Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

-Beacause of rounding, sums of estimated numbers and estimated percents may not add to totals.

B. Educational Background

1. Basic Nursing Education

a. Type of Basic Nursing Education

Prior to the establishment of the first nursing program at the New England Hospital for Women and Children in 1871, training of nurses in this country was informal. The movement toward formal hospital-based programs grew rapidly with the number of such schools increasing from 15 in 1880 to 432 in 1900. As states moved toward requiring licensure for nurses, education in these programs became standardized and hospital-based diploma schools emerged as the major source of registered nurses during the first half of this century.

The first baccalaureate programs in the United States began in the 1920s, and the initial associate degree nursing program was established in 1952. Between 1964 and 1979, the overall number of nursing programs in the United States increased from 1,150 to 1,374. However, the change in composition of these basic nursing education programs reflects a change in the emphasis of nursing education over the last 20 years. Today the total number of diploma schools is less than half of what it was at the beginning of the 1960s, while at the same time the numbers of associate and baccalaureate degree programs, and consequently associate and baccalaureate nurses, have dramatically increased.

During the last 20 years, a trend away from diploma preparation toward associate and baccalaureate degree programs can be noted. The number of diploma graduates dropped steadily during the 1960s. The period 1970 to 1974 was the first time less than half of the new nurses were graduates of diploma programs. During the years 1975 to 1980, the number of diploma graduates dropped further so that they represented only about one quarter of each year's graduating nurses. At the same time, the percentage of associate and baccalaureate degree graduates increased significantly so that together they now represent approximately three-fourths of the new nurses.

Although the past emphasis on hospital-based diploma education is still reflected in the basic educational preparation of today's licensed nurse population, the influence of these recent graduates is causing the situation to change.

The survey indicated that just under two-thirds or 1,050,662 of the 1,662,383 nurses in the U. S. received their training at hospital-based diploma schools. This figure represents a substantial drop from the three-fourths reporting diploma preparation in 1977 and the estimated 83 percent of diploma graduates in 1972. As the proportion of diploma nurses in the nurse population decreases, increases can be noted in the percentage of nurses who received their basic preparation in either associate degree or baccalaureate programs.

The influx of newly prepared baccalaureate graduates has resulted in an increase in the proportion of this group to the total nurse population. Seventeen percent or 287,993 of the nation's nurses now report baccalaureate degrees as the result of their basic nursing education. This represents an increase from 14 percent in 1977 and 12 percent in 1972.

The 1980 estimate of 308,616 nurses with an associate degree represents an increase in the number and percent of nurses over previous years. The percentage of nurses in the total nurse population with an associate degree basic education has grown from 11 percent in 1977 to 19 percent in 1980. The proportion of nurses who completed an associate degree program is now about the same as those who graduated from a baccalaureate program. If the trend of associate degree graduates comprising the highest proportion of annual graduates continues as it has during the 1970s, it can be expected that the proportion of these nurses will increase still further, relative to nurses who obtain their basic nursing education from a baccalaureate program (see Exhibit 12).

b. Basic Nursing Education of Minorities

A higher percentage of minority nurses received associate degrees and baccalaureate degrees than did nurses of nonminority background. While almost two-thirds of nonminority nurses attended diploma programs, less than half of minority nurses did. Over half of those nurses who reported a minority racial/ethnic background had an associate degree or baccalaureate basic nursing education. This compared to one-third of the nonminority nurses reporting the same level of basic education.

Overall, by basic education, 55,276 or 5.3 percent of diploma nurses, 34,284 or 11.1 percent of associate degree nurses, and 29,003 or 10.0 percent of baccalaureate and higher degree nurses were minorities (see Exhibit 13).

c. Gender of Basic Nursing Graduates

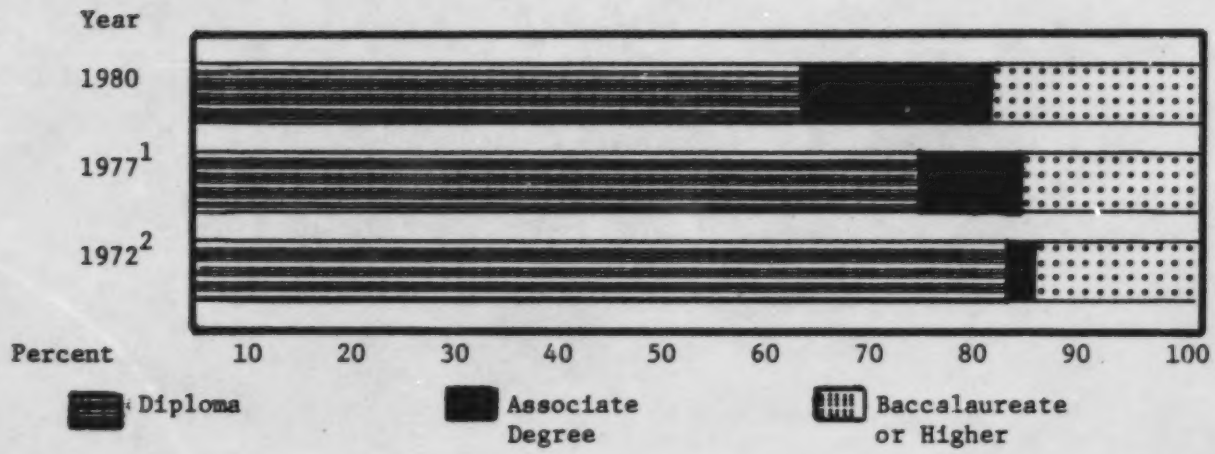
Although men make up only 2.7 percent (or 45,060) of the nurse population licensed in the United States, a large percentage of them are prepared at associate degree and baccalaureate degree levels. While only about one-third of female nurses had received associate degree or baccalaureate degree basic nursing education, three-fifths of the male nurses had obtained these degrees. This difference is especially noticeable on the associate degree level where 40.2 percent of the men had been awarded this degree as compared to 18.6 percent of the women (see Exhibit 14).

d. Age at Graduation From Basic Education

The average age at graduation of those nurses who completed their basic nursing education since 1978 was 26.1 years. For those nurses receiving a diploma, their average age at graduation was 23.4 years. The associate degree nures' average age at graduation (28.6 years) is higher than those nurses graduating from a baccalaureate program where the average age was 24.3 years.

Three-fifths of those nurses who completed their basic nursing education since 1978 were graduated by age 25. An additional 18 percent had completed their basic education by the time they were 30 years old and another 15 percent were graduated during their thirties. Six percent of the nurses graduated when they were 40 years old or older.

Exhibit 12. Estimated Percent of Registered Nurses by Type of Basic Nursing Educational Preparation



[1]Roth, Aleda V., Deborah Graham, and Gordon Schmittling. American Nurses Association, National Sample Survey of Registered Nurses (1977): A Report on the Nurse Population and Factors Affecting Their Supply.

[2]Roth, Aleda V. and Alice R. Walden. American Nurses Association, The Nation's Nurses: 1972 Inventory of Registered Nurses.

Exhibit 13. Basic Nursing Education by Race/Ethnic Background.

Basic Nursing Education	Total		Nonminority		Minority		Not Known
	Number	Percent	Number	Percent	Number	Percent	
Total	1,662,383	100.0	1,521,754	100.0	119,512	100.0	21,118
Diploma	1,050,662	63.2	980,293	64.4	55,276	46.3	15,093
Associate degree	308,616	18.6	270,766	17.8	34,284	28.7	3,566
Baccalaureate or Masters	289,585	17.4	259,284	17.0	29,003	24.3	1,298
Not known	13,520	0.8	11,411	0.7	948	0.8	1,161

NOTE: -Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing or lived in the United States, if not employed in nursing.

-Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

Exhibit 14. Basic Nursing Education by Sex.

Level of Preparation of Basic Nursing Education	Total		Female		Male		Not Known
	Number	Percent	Number	Percent	Number	Percent	
Total	1,662,383	100.0	1,603,069	100.0	45,060	100.0	14,254
Diploma	1,050,662	63.2	1,024,594	63.9	16,686	37.0	9,382
Associate Degree	308,616	18.6	287,875	18.0	18,129	40.2	2,612
Baccalaureate or Masters	289,585	17.4	278,467	17.4	9,612	21.3	1,506
Not known	13,520	0.8	12,133	0.8	633	1.4	754

NOTE: -Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

-Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

e. Foreign Nurse Graduates

Of the registered nurses in the United States, there were 59,935 or 3.6 percent who received their basic nursing education outside the United States. Most came from the Philippines, Canada, and England.

A higher percentage of nurses educated outside the United States received diplomas (76.9 percent) for their basic nursing education than did those educated in the United States (see Exhibit 15). Although very few nurses educated outside this country had received an associate degree (3.7 percent), a percentage comparable to the U.S. educated nurses had received a baccalaureate or higher degree as their basic education (18.6 percent).

2. Highest Educational Preparation

a. Nurses Who Obtained Additional Degrees

Increasing numbers of registered nurses continued their formal education beyond the basic nursing education level. Over 15 percent, or 255,682, of the nurses received an additional degree beyond their basic preparation. Of those nurses who continued their formal educational preparation, 211,236 obtained an additional degree that was related to their nursing career. The percentage figure (12.7 percent) shows a slight increase over 1977 when less than 12 percent of the nurses had additional preparation.

For the majority of nurses, basic nursing education remains their highest educational preparation. However, the survey data indicated an increase over 1977 in the percentage of nurses from all basic preparation programs who returned to school.

As indicated in Exhibit 16, the 308,616 nurses who received an associate degree as their initial nursing education were the least likely of all the graduates to obtain additional degrees subsequent to their basic preparation. About 91 percent or 281,231 of these nurses received no additional degree to their basic education. Of those who did continue their education, 7.3 percent or 22,388 nurses completed baccalaureates in nursing or a related field, while 4,998 nurses (1.6 percent) received masters or doctorates.

Fourteen percent or 147,530 of those nurses who attended diploma programs went on to receive additional degrees. Less than 2 percent of these diploma school graduates obtained associate degrees. About 9 percent fulfilled baccalaureate requirements and less than 4 percent received masters or doctorate degrees. Thirteen percent of the 289,585 nurses who attended baccalaureate or masters nursing programs as their basic preparation returned to school for a masters or doctorate.

Approximately 18 percent or 295,318 of all the nurses licensed in 1980 had an associate degree as their highest credential as compared to 11 percent in 1977 and 5 percent in 1972 (see Exhibit 17). Over half (54.3 percent) or 903,132 of the total nurse population in 1980 had a diploma as their highest nursing educational preparation. This represents a decrease in percentage from 67 percent in 1977 and an estimated 77 percent in 1972.

Exhibit 15. Basic Nursing Education of U.S. and Foreign Educated Nurses.

Type of Basic Nursing Education	Total		U.S. Educated		Foreign Educated		Not Known
	Number	Percent	Number	Percent	Number	Percent	
Total	1,662,383	100.0	1,589,270	100.0	59,935	100.0	13,178
Diploma	1,050,662	63.2	994,682	62.6	46,087	76.9	9,893
Associate degree	308,616	18.6	305,125	19.2	2,212	3.7	1,279
Baccalaureate or Masters	289,585	17.4	276,960	17.4	11,143	18.6	1,483
Not known	13,520	0.8	12,504	0.8	493	0.8	523

NOTE: -Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

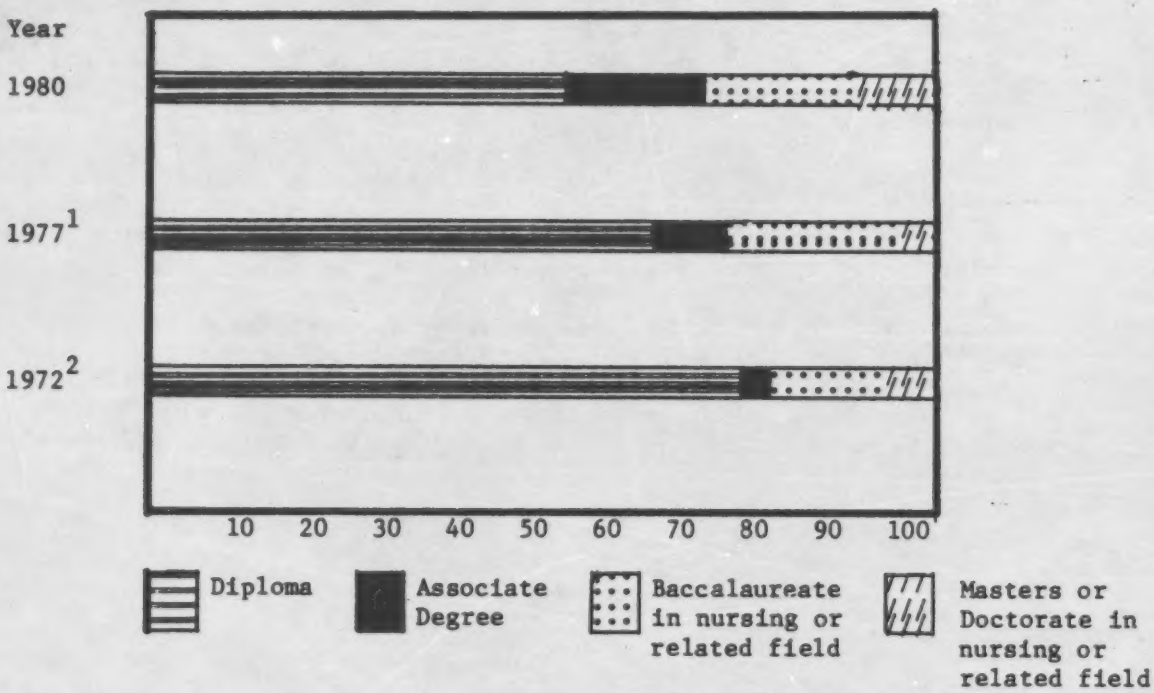
-Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

Exhibit 16. Highest Nursing Education Preparation by Basic Nursing Educational Preparation

Highest Nursing Educational Preparation	Total		Basic Nursing Education Preparation						
			Diploma		Associate Degree		Baccalaureate or Masters		Not Known
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
Total	1,662,383	100.0	1,050,662	100.0	308,616	100.0	289,585	100.0	13,520
Diploma	903,132	54.3	903,132	86.0	0	0.0	0	0.0	0
Associate Degree	295,318	17.8	13,405	1.3	281,231	91.1	0	0.0	683
Baccalaureate	367,816	22.1	93,015	8.9	22,388	7.3	251,811	87.0	602
Masters or Doctorate	85,860	5.2	41,110	3.9	4,998	1.6	37,775	13.0	1,978
Not Known	10,258	0.6	0	0.0	0	0.0	0	0.0	10,258

NOTE: -Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

Exhibit 17. Estimated Percent of Registered Nurses by Type of Highest Nursing Educational Preparation



[1]Roth, Aleda V., Deborah Graham, and Gordon Schmittling. American Nurses Association, National Sample Survey of Registered Nurses (1977): A Report on the Nurse Population & Factors Affecting Their Supply.

[2]Roth, Aleda V. and Alice R. Walden. American Nurses Association, The Nation's Nurses: 1972 Inventory of Registered Nurses.

The 326,320 nurses whose highest degree in 1980 was a baccalaureate in nursing comprised 19.6 percent of the population. An additional 2.5 percent or 41,496 had baccalaureate degrees which were related to nursing. These combined figures of 22.1 percent represent an increase over the 18 percent in 1977 and 15 percent in 1972 of nurses with baccalaureate degrees in or related to nursing. Overall, 5.2 percent of the nurses have a masters or doctorate as their highest nursing educational preparation. Most of these nurses with advanced degrees completed diploma or baccalaureate programs as their basic nursing preparation.

b. Primary Focus of Graduate Degree

Over two-fifths (41.9 percent) of nurses with masters or doctorates took clinical practice specialty in their graduate programs. One third (32.7 percent) indicated that education was the primary focus of their program, with another 17.3 percent majoring in supervision/administration. When these figures are delineated by type of degree, certain differences become evident (see Exhibit 18). Those nurses with a Masters degree in nursing were likely to focus on clinical practice, while those with a masters degree in a related field and those with doctorates tended to focus on education.

Exhibit 18. Primary Focus of Masters and Doctorate Nurses

Degree	Primary Focus				
	Education	Supervision/ Administration	Clinical Practice	Other	Not Known
Masters in Nursing	23.9	15.4	56.2	1.7	2.8
Masters in Related Field	47.5	22.8	16.9	11.3	1.5
Doctorate	54.9	5.9	13.9	23.6	1.8

NOTE: Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

3. Current Enrollment in Formal Education Program

a. Nurses Enrolled in Education Programs

Approximately one out of every ten licensed nurses, or 167,230 nurses, were enrolled in a formal education program. This is about the same percentage reported in 1977. The majority (70.0 percent) of these students were in baccalaureate programs with another 23.7 percent working towards masters degrees (see Exhibit 19).

Exhibit 19. Current Enrollment in Academic Program

Degree Sought	Nurses Currently Enrolled in Academic Program	
	Number	Percent
Total	167,230	100.0
Associate degree	3,504	2.1
Baccalaureate degree	117,014	70.0
Masters degree	39,555	23.7
Doctoral degree	5,766	3.5
Not known	1,392	0.8

NOTES: -Because of rounding, sums of the estimated percents may not add to totals.
-Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

Nurses whose highest educational preparation was a baccalaureate in a nursing-related field had a relatively high rate of current enrollment in an academic program. Twenty percent or 8,255 of the nurses with a baccalaureate in a related field were pursuing a higher degree (see Exhibit 20). Nurses whose highest educational preparation was an associate degree had the next highest percentage of nurses enrolled in a formal education program at 14.9 percent (43,919 nurses). The 73,578 diploma nurses enrolled in an educational program represented the largest number of nurses for any higher educational preparation category, though it represents only 8.2 percent of the diploma nurses.

Of nurses with a masters in nursing, 10.9 percent were enrolled while approximately one in ten of the nurses with a baccalaureate in nursing were in school. As would be expected, those who already had doctorate degrees had the lowest percentage of nurses enrolled in school (6.1 percent).

b. Employment Status of Nurses Currently Enrolled in Formal Education Programs

The majority (89.5 percent) of nurses pursuing a higher degree are employed in nursing. Of those, almost three-fourths are working in nursing full-time. As might be expected due to their employment status, most of these nurses are enrolled as part time students (see Exhibit 21). Over 80 percent of the nurses indicated a part-time student status.

c. Financial Support for Nurse Currently Enrolled in Formal Education Programs

When nurses were asked to indicate sources of financial support, personal savings and personal earnings were most often cited by nurses in all degree programs (see Exhibit 22). Employer tuition reimbursement plans and

Exhibit 20. Current Enrollment in Academic Programs by Highest Educational Preparation

Highest Educational Preparation	Total		Enrolled		Not Enrolled		Not Known	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,662,382	100.0	167,230	10.0	1,441,415	86.7	53,738	3.2
Diploma	903,132	100.0	73,578	8.2	801,467	88.7	28,086	3.1
Associate	295,318	100.0	43,919	14.9	243,797	82.6	7,603	2.6
Baccalaureate in nursing	326,320	100.0	31,164	9.6	286,062	87.7	9,094	2.8
Baccalaureate in related field	41,496	100.0	8,255	19.9	30,820	74.3	2,420	5.8
Masters in nursing	55,055	100.0	6,012	10.9	45,950	83.5	2,092	5.6
Masters in related field	26,697	100.0	3,113	11.7	21,597	80.9	1,987	7.4
Doctorate	4,108	100.0	250	6.1	3,453	84.1	406	9.9
Not Known	10,258	100.0	939	9.2	8,270	80.6	1,049	10.2

NOTES: -Includes only registered nurses actively licensed in November 1980 who worked in the United States if employed in nursing or lived in the United States if not employed in nursing.
-Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

Exhibit 21. Student Status by Employment Status for Nurses Enrolled in a Formal Education Program

Employment Status	Total		Student Status				
			Full-Time		Part-Time		Not Known
	Number	Percent	Number	Percent	Number	Percent	
Total	167,230	100.0	32,136	100.0	134,708	100.0	386
Employed as Nurse							
Full-Time	108,077	64.6	10,007	31.1	97,774	72.6	297
Part-Time	40,078	24.0	13,831	43.0	26,194	19.5	52
Not Known	1,451	0.9	357	1.1	1,094	0.8	0
Not Employed as Nurse	17,610	10.5	7,926	24.7	9,647	7.2	37
Not Known	15	0.0	15	0.1	0	0.0	0

NOTES: -Includes only registered nurses actively licensed in November 1980 who worked in the United States if employed in nursing or lived in the United States if not employed in nursing.
-Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

Exhibit 22. Frequency Financial Sources Were Indicated for Nurses Enrolled in Education Programs[1/]

Source of Financial Support	Associate Degree		Baccalaureate		Masters		Doctorate	
	Number Indicating Source	Percent Indicating Source	Number Indicating Source	Percent Indicating Source	Number Indicating Source	Percent Indicating Source	Number Indicating Source	Percent Indicating Source
Total[2/]	3,504	100.0	117,014	100.0	39,555	100.0	5,766	100.0
Personal savings	1,511	43.1	38,776	33.1	13,856	35.0	2,336	40.5
Your own personal earnings from employment	1,785	51.0	76,638	65.5	21,768	55.0	3,906	67.7
Spouse's earnings from employment	-[3/]	-[3/]	23,732	20.3	8,208	20.8	1,348	23.4
Parental contributions	-[3/]	-[3/]	4,564	3.9	1,526	3.9	-[3/]	-[3/]
Federal traineeship, scholarship, or grant	-[3/]	-[3/]	3,637	3.1	6,912	17.5	672	11.7
Federally-assisted loan	-[3/]	-[3/]	4,670	4.0	3,618	9.2	579	10.1
State or local government loan or scholarship	-[3/]	-[3/]	4,015	3.4	1,341	3.4	[3/]	[3/]
Nongovernmental scholarship, loan, or grant	-[3/]	-[3/]	3,419	2.9	1,076	2.7	-[3/]	-[3/]
University teaching or research fellowship	-[3/]	-[3/]	-[3/]	-[3/]	552	1.4	554	9.6
Employer tuition reimbursement plan	1,040	29.7	38,834	33.2	10,498	26.5	879	15.3
Other sources	-[3/]	-[3/]	2,829	2.4	1,907	4.8	-[3/]	-[3/]

NOTES:

[1/] Includes only registered nurses actively licensed in November 1980 who worked in the United States if employed in nursing or lived in the United States if not employed in nursing.

[2/] Column will add to more than total because more than one source could be indicated.

[3/] Less than 10 persons responded.

spouse's earnings were the next most important sources of financial support. Federal financial support was utilized most often by masters and doctoral students.

4. Nurses Who Have Completed a Formal Nurse Practitioner Program

The first formal training program for nurse practitioners was established at the University of Colorado in 1965 for the purpose of providing registered nurses with the substantive knowledge and clinical skills necessary to perform an expanded scope of practice. Some nurses had probably functioned in an extended capacity before that date and other nurses today continue to perform these tasks without formal training.

According to survey data, an estimated 69,819 or 4.2 percent of the nation's nurses have completed formal nurse practitioner educational programs. It is expected, however, that this is an overestimate because a large number (24.5 percent) of the respondents indicated their specialty as "other" when, in fact, the choices for nurse practitioners' specialties included in the questionnaire should have covered most all of the formal training programs. This suspected overestimate should be kept in mind when interpreting the following results.

Of the estimated 69,819 nurses who had nurse practitioner training, about three-fourths were awarded certificates at the completion of their course of study and over 9 percent received master's degrees. Another 9 percent indicated other credentials such as baccalaureate or associate degrees at the completion of their programs. Seven percent did not indicate what they received when they completed the program.

Over one-third of nurses who completed nurse practitioner programs specialized in the primary care specialties of family, pediatric, or adult practice (see Exhibit 23). Higher proportions of nurses with nurse practitioner master's degrees specialized in psychiatric nursing, family practice, and midwifery than did those with certificates.

5. Continuing Education

Creditable continuing education activities include a wide variety of educational experiences such as seminars and workshops, individual preparation, and research and publications. The American Nurse Association has established guidelines and criteria for continuing education so that credits can be transferable among states. Some state governments have recently moved toward requiring completion of a specific number of continuing education hours as a prerequisite for licensure renewal. In 1978, California became the first state with an effective system of mandatory continuing education. Several other states have since followed suit or are in the process of developing mandatory continuing education systems.

More than 70 percent or 1,167,340 of all licensed nurses participated in some type of continuing education during the reporting year. Of those nurses who participated in continuing education programs, 88.8 percent were employed in nursing. As indicated in Exhibit 24, the types of programs most often cited were workshops/institutes, staff development and clinical conferences.

Exhibit 23. Nurse Practitioner Specialties

Specialty	Total		Certificate		Masters		Other		Not Known
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Total	69,819	100.0	52,158	100.0	6,533	100.0	6,269	100.0	4,860
Pediatric	8,454	12.1	7,319	14.0	440	6.7	*	*	*
Midwifery	4,752	6.8	3,443	6.6	872	13.3	*	*	*
Maternity	3,690	5.3	2,929	5.6	*	*	*	*	*
Family	10,736	15.4	7,918	15.2	1,893	29.0	758	12.1	*
Adult	6,157	8.8	4,949	9.5	762	11.7	*	*	*
Psychiatric	3,407	4.9	1,475	2.8	1,238	19.0	*	*	*
Geriatric	1,420	2.0	763	1.5	*	*	*	*	*
School	2,847	4.1	2,110	4.1	*	*	*	*	*
Other	17,102	24.5	13,340	25.6	*	*	2,367	37.8	1,021
Not Known	11,254	16.1	7,912	15.2	*	*	1,298	20.7	1,918

*Less than 10 persons responded.

Exhibit 24. Type of Continuing Education Program in Which Nurses Participated

Type of Continuing Education Program	Number Participating	Percent of Nurses in U. S. Participating
Total	1,167,840*	70.3*
Clinical Conference	500,318	30.1
Workshop/Institute	739,439	44.5
Multi-media (television, telephone, etc.)	107,510	6.5
Refresher Program	115,906	7.0
Programmed Instruction	298,932	18.0
Staff Development	577,126	34.7
Other	41,597	2.5

*Column will add to more than total because more than one program could be indicated.

NOTE: -Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

Nearly sixty percent of those nurses who participated in continuing education during the past year had received 20 or more hours of instruction. Over 21 percent had accumulated over 40 hours.

The nurses who participated in continuing education programs during the past year received financial support from a variety of sources. Respondents were asked to indicate all types of financing of their instruction. Over half (53.1 percent) indicated that their employer contributed to their continuing education costs and approximately one in ten only took continuing education as part of regular employment. Almost 55 percent of the nurses personally paid some or all of their continuing education fees. Twenty-six percent attended programs that were free to participants.

Conflict with family responsibilities was the most often cited reason for nonparticipation among the 472,730 nurses who had not participated in continuing education programs during the reporting year. An estimated 206,085 or 43.6 percent of the nurses cited this reason. The next most often cited reason for nonparticipation was that the nurse did not feel a need to participate. An estimated 120,414 (25.5 percent) nurses indicated this response. The frequency with which other reasons were cited for nonparticipation in continuing education programs are given in Exhibit 25.

Exhibit 25. Reasons Given for Not Participating in Continuing Education Programs

Reason for Nonparticipation	Frequency Indicated	Percent of Nurses Not Taking Continuing Education Courses that Indicated Reason
Total	472,730*	100.0*
No programs available to me	31,709	6.7
No programs available which are applicable to my field of interest	36,721	7.8
Family responsibilities prevent it	206,085	43.6
Feel no need to	120,414	25.5
Cannot be released from job	27,843	5.9
Job does not require it	62,302	13.2
Courses not given at convenient times	82,562	17.5
Courses are too expensive	99,710	21.1
Other	57,560	12.2

*Column will add to more than total because more than one reason could be indicated.

NOTE: -Includes only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing, or lived in the United States, if not employed in nursing.

EDUCATIONAL BACKGROUND TABLES

TABLE 5. Year of Graduation from Basic Education for Registered Nurses, November 1980

Basic Nursing Education	Year of Graduation													
	Total	Before 1940	1940-1949	1950-1959	1960-1964	1965-1969	1970-1974	1975	1976	1977	1978	1979	1980	Not Known
a. National Estimate														
Total	1,662,383	93,823	239,709	275,429	163,230	191,249	268,325	73,868	73,880	73,896	71,639	72,661	52,801	11,873
Diploma	1,050,662	90,287	225,908	242,793	134,344	134,204	115,766	20,077	20,348	17,642	15,750	16,527	10,187	6,828
Associate Degree	308,616	0	0	4,250	6,233	22,249	90,893	29,715	30,902	32,026	33,770	32,353	26,224	0
Baccalaureate or Masters	289,585	1,355	10,728	27,254	22,346	34,379	60,745	24,016	22,591	24,062	22,024	23,678	16,375	32
Not known	13,520	2,181	3,073	1,131	307	417	921	59	39	166	95	103	14	5,013
b. Percent														
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Diploma	63.2	96.2	94.2	88.2	82.3	70.2	43.1	27.2	27.5	23.9	22.0	22.8	19.3	57.5
Associate Degree	18.6	0.0	0.0	1.5	3.8	11.6	33.9	40.2	41.8	43.3	47.1	44.5	49.7	0.0
Baccalaureate or Masters	17.4	1.5	4.5	9.9	13.7	18.0	22.6	32.5	30.6	32.6	30.7	32.6	31.0	0.3
Not known	0.8	2.3	1.3	0.4	0.2	0.2	0.3	0.1	0.0	0.2	0.1	0.1	0.1	42.2

TABLE 5. (continued)

Basic Nursing Education	Year of Graduation													
	Total	Before 1940	1940-1949	1950-1959	1960-1964	1965-1969	1970-1974	1975	1976	1977	1978	1979	1980	Not Known
c. Sample														
Total	30,375	1,536	4,273	5,028	2,964	3,440	5,062	1,399	1,348	1,405	1,345	1,353	986	236
Diploma	18,741	1,481	4,020	4,417	2,430	2,399	2,074	367	349	324	279	276	185	140
Associate Degree	5,786	0	0	66	113	389	1,718	567	578	609	644	619	483	0
Baccalaureate or Masters	5,605	21	198	526	415	643	1,257	463	420	470	420	454	317	1
Not known	243	34	55	19	6	9	13	2	1	2	2	4	1	95

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Include only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing or lived in the United States, if not employed in nursing.

TABLE 6. Basic Nursing Education of Registered Nurses by Race/Ethnic Background, November 1980

Basic Nursing Education	Total	Non-minority Total	Minority (Race)					Not Known
			Total	Hispanic	Indian/ Alaskan	Asian	Black	
a. National Estimate								
Total	1,662,383	1,521,754	119,512	20,816	4,249	33,601	60,845	21,118
Diploma	1,050,662	980,293	55,276	11,456	2,197	17,330	24,292	15,093
Associate Degree	308,616	270,766	34,284	5,823	1,300	3,395	23,766	3,566
Baccalaureate or Masters	289,585	259,284	29,003	3,538	752	12,530	12,184	1,298
Not Known	13,520	11,411	948	0	0	345	604	1,161
b. Percent								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Diploma	63.2	64.4	46.3	55.0	51.7	51.6	39.9	71.5
Associate Degree	18.6	17.8	28.7	28.0	30.6	10.1	39.1	16.9
Baccalaureate or Masters	17.4	17.0	24.3	17.0	17.7	37.3	20.0	6.2
Not Known	0.8	0.7	0.8	0.0	0.0	1.0	1.0	5.5
c. Sample								
Total	30,375	28,018	1,950	383	87	575	905	407
Diploma	18,741	17,537	905	216	48	295	346	299
Associate Degree	5,786	5,175	551	101	26	78	346	60
Baccalaureate or Masters	5,605	5,098	477	66	13	196	202	30
Not Known	243	208	17	0	0	6	11	18

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Include only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing or lived in the United States, if not employed in nursing.

TABLE 7. Basic Nursing Education of Registered Nurses by Sex, November 1980

Basic Nursing Education	Total	Sex		Not Known
		Female	Male	
a. National Estimate				
Total	1,662,383	1,603,069	45,060	14,254
Diploma	1,050,662	1,024,594	16,686	9,382
Associate Degree	308,616	287,875	18,129	2,612
Baccalaureate or Masters	289,585	278,467	9,612	1,506
Not Known	13,520	12,133	633	754
b. Percent				
Total	100.0	100.0	100.0	100.0
Diploma	63.2	63.9	37.0	65.8
Associate Degree	18.6	18.0	40.2	18.3
Baccalaureate or Masters	17.4	17.4	21.3	10.6
Not Known	0.8	0.8	1.4	5.3
c. Sample				
Total	30,375	29,275	824	276
Diploma	18,741	18,278	276	187
Associate Degree	5,786	5,396	344	46
Baccalaureate or Masters	5,605	5,381	192	32
Not Known	243	220	12	11

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Include only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing or lived in the United States, if not employed in nursing.

TABLE 8. Type of Basic Education of U.S. and Foreign Educated Nurses, November 1980

Basic Nursing Education	Total	Country of Education		Not Known
		U.S.	Foreign	
Total	1,662,383	1,589,270	59,935	13,178
Diploma	1,050,662	994,682	46,087	9,893
Associate Degree	308,616	305,125	2,212	1,279
Baccalaureate or Masters	289,585	276,960	11,143	1,483
Not Known	13,520	12,504	493	523
b. Percent				
Total	100.0	100.0	100.0	100.0
Diploma	63.2	62.6	76.9	75.1
Associate Degree	18.6	19.2	3.7	9.7
Baccalaureate or Masters	17.4	17.4	18.6	11.3
Not Known	0.8	0.8	0.8	4.0
c. Sample				
Total	30,375	29,340	813	222
Diploma	18,741	17,944	631	166
Associate Degree	5,786	5,735	29	22
Baccalaureate or Masters	5,605	5,437	146	22
Not Known	243	224	7	12

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Include only registered nurses actively licensed in November 1980 who worked in the United States, if employed in nursing or lived in the United States, if not employed in nursing.

TABLE 9. Highest Educational Preparation by Basic Nursing Preparation of Registered Nurses, November 1980

Highest Educational Preparation	Basic Nursing Preparation				
	Total	Diploma	Associate Degree	Baccalaureate or Masters	Not Known
a. National Estimate					
Total	1,662,383	1,050,662	308,616	289,585	13,520
Diploma	903,132	903,132	0	0	0
Associate Degree	295,318	13,405	281,231	0	683
Baccalaureate in Nursing	326,320	59,068	16,765	250,248	238
Baccalaureate in Related Field	41,496	33,947	5,622	1,563	364
Masters in Nursing	55,055	23,157	2,709	27,797	1,391
Masters in Related Field	26,697	15,974	2,202	8,074	447
Doctorate	4,108	1,979	87	1,904	139
Not Known	10,258	0	0	0	10,258
b. Percent					
Total	100.0	100.0	100.0	100.0	100.0
Diploma	54.3	86.0	0.0	0.0	0.0
Associate Degree	17.8	1.3	91.1	0.0	5.1
Baccalaureate in Nursing	19.6	5.6	5.4	86.4	1.8
Baccalaureate in Related Field	2.5	3.2	1.8	0.5	2.7
Masters in Nursing	3.3	2.2	0.9	9.6	10.3
Masters in Related Field	1.6	1.5	0.7	2.8	3.3
Doctorate	0.3	0.2	0.0	0.7	1.0
Not Known	0.6	0.0	0.0	0.0	75.9

TABLE 9. (cont.)

Highest Educational Preparation	Basic Nursing Preparation				
	Total	Diploma	Associate Degree	Baccalaureate or Masters	Not Known
c. Sample					
Total	30,375	18,741	5,786	5,605	243
Diploma	16,278	16,278	0	0	0
Associate Degree	5,528	206	5,305	0	17
Baccalaureate in Nursing	6,206	1,036	302	4,860	8
Baccalaureate in Related Field	663	527	102	27	7
Masters in Nursing	1,001	402	48	529	22
Masters in Related Field	450	258	28	156	8
Doctorate	69	34	1	33	1
Not Known	180	0	0	0	180

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Include only registered nurses actually licensed in November 1980 who worked in the United States, if employed in nursing or lived in the United States, if not employed in nursing.

TABLE 10. Highest Educational Preparation of Registered Nurses by Race/Ethnic Background, November 1980

Highest Nursing Preparation	Total	Non-minority	Minority	Not Known
a. National Estimate				
Total	1,662,383	1,521,754	119,512	21,118
Diploma	903,132	849,794	40,766	12,571
Associate Degree	295,318	259,452	31,867	3,999
Baccalaureate in Nursing	326,320	290,421	34,082	1,816
Baccalaureate in Related Field	41,496	37,471	3,517	508
Masters in Nursing	55,055	49,299	4,878	879
Masters in Related Field	26,697	23,082	3,076	539
Doctorate	4,108	3,611	469	29
Not Known	10,258	8,623	857	778
b. Percent				
Total	100.0	100.0	100.0	100.0
Diploma	54.3	55.8	34.1	59.5
Associate Degree	17.8	17.1	26.7	18.9
Baccalaureate in Nursing	19.6	19.1	28.5	8.6
Baccalaureate in Related Field	2.5	2.5	2.9	2.4
Masters in Nursing	3.3	3.2	4.1	4.2
Masters in Related Field	1.6	1.5	2.6	2.6
Doctorate	0.3	0.2	0.4	0.1
Not Known	0.6	0.6	0.7	3.7
c. Sample				
Total	30,375	28,018	1,950	407
Diploma	16,278	15,314	701	263
Associate Degree	5,528	4,949	513	66
Baccalaureate in Nursing	6,206	5,620	550	36
Baccalaureate in Related Field	663	610	44	9
Masters in Nursing	1,001	913	75	13
Masters in Related Field	450	399	44	7
Doctorate	69	60	8	1
Not Known	180	153	15	12

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Include only registered nurses actually licensed in November 1980 who worked in the United States, if employed in nursing or lived in the United States, if not employed in nursing.

TABLE 11. Highest Educational Preparation of Registered Nurses by Current Enrollment in Academic Program, November 1980

Highest Nursing Preparation	Current Enrollment in Academic Program			
	Total	Currently Enrolled	Not Enrolled	Not Known
a. National Estimates				
Total	1,662,382	167,230	1,441,415	53,738
Diploma	903,132	73,578	801,467	28,086
Associate Degree	295,318	43,919	243,797	7,603
Baccalaureate in Nursing	326,320	31,164	286,062	9,094
Baccalaureate in Related Field	41,496	8,255	30,820	2,420
Masters in Nursing	55,055	6,012	45,950	3,093
Masters in Related Field	26,697	3,113	21,597	1,987
Doctorate	4,108	250	3,453	406
Not Known	10,258	939	8,270	1,049
b. Percent				
Total	100.0	100.0	100.0	100.0
Diploma	54.3	44.0	55.6	52.3
Associate Degree	17.8	26.3	16.9	14.1
Baccalaureate in Nursing	19.6	18.6	19.9	16.9
Baccalaureate in Related Field	2.5	4.9	2.1	4.5
Masters in Nursing	3.3	3.6	3.2	5.8
Masters in Related Field	1.6	1.9	1.5	3.7
Doctorate	0.3	0.2	0.2	0.8
Not Known	0.6	0.6	0.6	2.0

TABLE 11 (continued)

Highest Nursing Preparation	Current Enrollment in Academic Program			
	Total	Currently Enrolled	Not Enrolled	Not Known
c. Sample				
Total	30,375	2,932	26,490	953
Diploma	16,278	1,282	14,477	519
Associate Degree	5,528	780	4,628	120
Baccalaureate in Nursing	6,206	571	5,470	165
Baccalaureate in Related Field	663	118	510	35
Masters in Nursing	1,001	103	841	57
Masters in Related Field	450	56	362	32
Doctorate	69	3	58	8
Not Known	180	19	144	17

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Include only registered nurses actually licensed in November 1980 who worked in the United States, if employed in nursing or lived in the United States, if not employed in nursing.

TABLE 12. Nurse Practitioner Training by Specialty, November 1980

Type of Specialty	Type of Program				
	Total	Certificate	Masters	Other	Not Known
a. National Estimate					
Total	69,819	52,158	6,533	6,269	4,860
Pediatric	8,454	7,319	440	403	293
Midwifery	4,752	3,443	872	206	231
Maternity	3,690	2,929	469	74	218
Family	10,736	7,918	1,893	758	168
Adult	6,157	4,949	762	359	87
Psychiatric	3,407	1,475	1,238	258	436
Geriatric	1,420	763	302	168	186
School	2,847	2,110	57	378	301
Other	17,102	13,340	374	2,367	1,021
Not Known	11,254	7,912	127	1,298	1,918
b. Percent					
Total	100.0	100.0	100.0	100.0	100.0
Pediatric	12.1	14.0	6.7	6.4	6.0
Midwifery	6.8	6.6	13.3	3.3	4.8
Maternity	5.3	5.6	7.2	1.2	4.5
Family	15.4	15.2	29.0	12.1	3.5
Adult	8.8	9.5	11.7	5.7	1.8
Psychiatric	4.9	2.8	19.0	4.1	9.0
Geriatric	2.0	1.5	4.6	2.7	3.8
School	4.1	4.1	0.9	6.0	6.2
Other	24.5	25.6	5.7	37.8	21.0
Not Reported	16.1	15.2	1.9	20.7	39.5

TABLE 12 (continued)

Type of Specialty	Total	Type of Program			
		Certificate	Masters	Other	Not Known
c. Sample					
Total	1,277	971	118	107	81
Pediatric	166	145	10	6	5
Midwifery	75	48	19	3	5
Maternity	70	57	7	2	4
Family	229	173	38	15	3
Adult	108	83	15	8	2
Psychiatric	49	21	17	3	8
Geriatric	30	21	4	2	3
School	50	40	1	6	3
Other	312	254	5	39	14
Not Known	188	129	2	23	34

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Include only registered nurses actually licensed in November 1980 who worked in the United States, if employed in nursing or lived in the United States, if not employed in nursing.

TABLE 13. Type Continuing Education Program by Employment Setting

Employment Status	Total	Clinical Conference	Workshop/ Institute	Multi-Media	Refresher Program	Programmed Instruction	Staff Development	Other
a. National Estimate								
Total	1,167,840	500,318	739,439	107,510	115,906	298,932	577,126	41,597
Full-Time RN	725,528	340,987	498,273	74,272	67,598	182,707	398,060	25,912
Part-Time RN	301,737	120,310	167,047	25,628	29,357	82,757	149,383	9,694
FT/PT Not Known	9,113	3,210	5,545	1,178	1,345	2,320	3,505	214
Not Employed as RN	130,677	35,721	68,469	6,431	17,607	31,148	26,088	5,777
Not Known	786	91	106	0	0	0	91	0
b. Percent								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Full-Time RN	62.1	68.2	67.4	69.1	58.3	61.1	69.0	62.3
Part-Time RN	25.8	24.1	22.6	23.8	25.3	27.7	25.9	23.3
FT/PT Not Known	0.8	0.6	0.8	1.1	1.2	0.8	0.6	0.5
Not Employed as RN	11.2	7.1	9.3	6.0	15.2	10.4	4.5	13.9
Not Known	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Sample								
Total	21,640	9,072	14,254	2,164	2,054	5,327	10,761	737
Full-Time RN	13,509	6,190	9,630	1,517	1,209	3,316	7,413	455
Part-Time RN	5,611	2,208	3,246	491	543	1,437	2,788	183
FT/PT Not Known	156	55	96	19	15	38	65	5
Not Employed as RN	2,349	618	1,280	137	287	536	494	94
Not Known	15	1	2	0	0	0	1	0

NOTE: -Because of rounding, sums of estimated number and percentages may not add to totals.
-Includes only registered nurses actively licensed in November 1980 who worked in the United States if Employed in nursing or lived in the United States if not employed in nursing.

C. Employment Characteristics of Registered Nurses Employed in Nursing as of November 1980

Of the RN population, three-fourths (76.6 percent), or 1.27 million, were employed as of November 1980 in one or more nursing positions. Two-thirds (67.2 percent) of the 1,272,852 RNs employed in nursing were employed full-time, whereas one-third (31.8 percent) were employed only part-time in a nursing position or were employed only part of the year on either a full-time or part-time basis. About 1 out of every 10 nurses employed in nursing held more than one position in nursing for pay. Most of the results presented in this section, however, are based on the principal nursing position held by the RNs.

When compared to the 1977 RN population, it is evident that there has been a substantial increase in the population of RNs employed in nursing. The 1980 data indicate an absolute increase of over one-quarter million RNs (294,618) in the RN work force in nursing. Part of this increase in the RN population employed in nursing can be attributed to the fact that a greater proportion of nurses licensed in 1980 as compared to 1977 were employed in nursing (76.6 percent in 1980 vs. 69.8 percent in 1977).

1. Type of Employment Setting

Hospitals have remained the predominant employment setting for registered nurses, as shown in Exhibit 26. Of those RNs employed in nursing, 835,647 or 65.7 percent, worked in hospitals in their primary nursing position. The second largest group, those indicating employment in nursing homes

Exhibit 26. Principal Employment Setting of Registered Nurses Employed in Nursing, November 1980.

Employment Setting	N	%
Hospital	835,647	65.7
Nursing Home/Extended Care	101,209	8.0
Nursing Education	46,504	3.7
Public Health/Community Health	83,440	6.6
Student Health Service	44,907	3.5
Occupational Health	29,164	2.3
Physician's or Dentist's Office	71,974	5.7
Private Duty Nursing	20,240	1.6
Other Self-Employed	10,853	0.9
Other	21,666	1.7
Not known	7,249	0.6
Total	1,272,852	100.0

NOTES: -Includes only registered nurses actively licensed in November 1980 who were employed as a nurse in the United States.
-Because of rounding, sums of the estimated numbers and percents may not add to the totals.

or extended care facilities, constituted 8.0 percent of employed RNs, followed by 6.6 percent in public health/community health, 5.7 percent in a physician's or dentist's office, 3.7 percent in nursing education, 3.5 percent in student health services, 2.3 percent in occupational health, 1.6 percent in private duty nursing, 0.9 percent in self-employed positions other than private duty nursing, and 1.7 percent in various other settings.

Examination of the type of employment setting for the 1980 nurse population reveals that a greater proportion were employed in hospital care settings (65.7 percent) than in 1977 (61.4 percent). The over four-fifths of a million nurses estimated to be employed in hospitals in 1980 represents an increase of 234,636 over their 601,011 counterparts in 1977.

There was a substantial decline from 1977 to 1980 both in the proportion and absolute number of nurses who worked in private duty nursing. A less marked decline is evident for those whose principal employment setting was physician's or dentist's office.

As shown in Exhibit 27, registered nurses employed in a private duty nursing setting or some other self-employed setting were more likely to work part-time than full-time (71.8 percent, 64.7 percent). A substantial proportion of nurses employed in a physician's or dentist's office (42.4 percent) or a nursing home/extended care facility (45.8 percent) were employed on a part-time basis. Of those employed in a hospital care setting, over two-thirds (68.8 percent) were employed full-time and less than one-third (30.6 percent) were employed part-time. Full-time employees in nursing education, public or community health, student health, and occupational health outnumbered their part-time counterparts by about four to one.

2. Highest Educational Preparation

Over one-half (50.7 percent) of all RNs employed in nursing had a diploma as their highest nursing-related educational preparation (see Exhibit 28). One out of every five (20.1 percent) had an associate degree as their highest educational preparation. More than one in twenty RNs employed in nursing had either a Masters degree (5.1 percent) or a doctorate degree (0.2 percent), and nearly one-fourth (23.3 percent) had a baccalaureate degree as their highest nursing-related educational preparation.

These data reflect the trend toward baccalaureate and higher preparation for RNs in the U.S. For example, it was estimated in 1972 that 85.2 percent of all nurses employed in nursing had either a diploma or associate program as their highest level of preparation. By 1977, this figure dropped to 76.9 percent, and, in 1980, it was still lower at 70.8 percent.

In general, the higher the educational preparation, the less likely it was for the RN to be employed in nursing home or extended care settings, and more likely for the RN to be involved in nursing education, public or community health, or student health (see Exhibit 29).

Exhibit 27. Principal Employment Setting by Part-Time or Full-Time Employment for Registered Nurses Employed in Nursing, November 1980.

Principal Employment Setting	Total		Full-Time		Part-Time		Not Known	
	N	%	N	%	N	%	N	%
Hospital Care	835,647	100.0	574,905	68.8	255,987	30.6	4,755	0.6
Nursing Home/ Extended Care	101,209	100.0	54,283	53.6	46,369	45.8	558	0.6
Nursing Education	46,504	100.0	35,547	76.4	10,829	23.3	129	0.3
Public Health/Community Health Setting	83,440	100.0	65,449	78.4	16,745	20.1	1,246	1.5
Student Health Service	44,907	100.0	32,332	72.0	12,214	27.2	361	0.8
Occupational Health	29,164	100.0	23,685	81.2	4,343	14.9	1,135	3.9
Physician's or Dentist's Office	71,974	100.0	41,041	57.0	30,535	42.4	398	0.6
Private Duty Nursing	20,240	100.0	5,353	26.4	14,528	71.8	359	1.8
Other Self-Employed	10,853	100.0	3,699	34.1	7,023	64.7	131	1.2
Other	21,666	100.0	15,777	72.8	5,823	26.9	67	0.3
Not Known	7,249	100.0	2,743	37.8	549	7.6	3,957	54.6
Total	1,272,852	100.0	854,813	67.2	404,943	31.8	13,096	1.0

NOTES: -Includes only registered nurses actively licensed in November 1980 who were employed as a nurse in the United States.
-Because of rounding, sums of the estimated numbers and percents may not add to the totals.

Exhibit 28. Highest Nursing-Related Educational Preparation of Registered Nurses Employed in Nursing, November 1980.

Highest Nursing-Related Educational Preparation	N	%
Diploma	645,494	50.7
Associate	256,167	20.1
Baccalaureate	296,202	23.3
Masters	65,224	5.1
Doctorate	2,968	0.2
Not Known	6,797	0.5
Total	1,272,852	100.0

NOTE: -Includes only registered nurses actively licensed in November 1980 who were employed in nursing as a nurse in the United States.

Exhibit 29. Principal Employment Setting by Highest Nursing-Related Educational Preparation for Registered Nurses Employed in Nursing, November 1980

Principal Employment Setting	Diploma		Associate		Baccalaureate		Masters or Doctorate		Not Known	
	N	%	N	%	N	%	N	%	N	%
Hospital Care	407,166	63.1	199,035	77.7	200,879	67.8	24,716	36.2	3,851	56.7
Nursing Home/Extended Care	71,182	11.0	16,923	6.6	11,483	3.9	1,163	1.7	458	6.7
Nursing Education	8,361	1.3	2,122	0.8	12,228	4.1	23,343	34.2	450	6.6
Public Health/Community Health Setting	35,191	5.5	12,001	4.7	28,498	9.6	7,595	11.1	156	2.3
Student Health Service	20,763	3.2	2,903	1.1	16,477	5.6	4,299	6.3	465	6.8
Occupational Health	20,574	3.2	3,510	1.4	4,036	1.4	856	1.3	188	2.8
Physician's or Dentist's Office	50,031	7.8	10,294	4.0	9,528	3.2	1,682	2.5	440	6.5
Private Duty Nursing	14,179	2.2	2,698	1.1	2,639	0.9	512	0.8	212	3.1
Other Self-Employed	4,391	0.7	1,777	0.7	2,960	1.0	1,707	2.5	18	0.3
Other	10,706	1.7	3,295	1.3	5,498	1.9	1,926	2.8	241	3.6
Not Known	2,951	0.5	1,611	0.6	1,977	0.7	393	0.6	318	4.7
Total	645,494	100.0	256,167	100.0	296,202	100.0	68,192	100.0	6,797	100.0

NOTES: -Includes only registered nurses activity licensed in November 1980 who were employed as a nurse in the United States
-Because of rounding, sums of the estimated numbers and percents may not add to the totals.

3. Type of Agency

As indicated in Exhibit 30, of the estimated 1,272,852 RNs employed in nursing in 1980, 750,888 or 59.0 percent indicated they principally worked for either a non-profit hospital or a proprietary hospital. A government agency was the second most likely agency for which to work (17.6 percent), followed by other non-government agencies (14.4 percent), self-employment (3.1 percent), and temporary employment services (1.5 percent). About 1 percent were employed at various other agencies and, for 3.2 percent, the type of agency was not known.

Exhibit 30. Type of Agency of Principal Nursing Position of Registered Nurses Employed in Nursing, November 1980.

Type of Agency	N	%
Government Agency	223,584	17.6
Temporary Employment Service	19,044	1.5
Nonprofit Hospital	595,121	46.8
Proprietary Hospital	155,767	12.2
Other Nongovernment Agency	182,874	14.4
Self-employed	40,020	3.1
Other	15,374	1.2
Not Known	41,068	3.2
Total	1,272,852	100.0

NOTES: -Includes only registered nurses activity licensed in November 1980 who were employed as a nurse in the United States.
-Because of rounding, sums of the estimated numbers and percents may not add to the totals.

4. Principal Position Title

As shown in Exhibit 31, nearly two-thirds (64.8 percent) of the estimated number of RNs employed in nursing had the title of staff, charge or general duty nurse. The second largest proportion (7.1 percent) of nurses had the title of head nurse or assistant head nurse.

Whereas 6.0 percent in 1980 had the title of supervisor or assistant supervisor, 6.8 percent had such a title in 1977. Another area showing a decrease over time is the proportion with the title of private duty nurse, which was 2.9 percent in 1977 and only 1.8 percent in 1980.

Increases were noted in the proportions of nurses reporting nurse practitioner as their title (1.0 percent in 1977, 1.3 percent in 1980) and clinical specialist (0.8 percent in 1977, 1.5 percent in 1980). However, for several other position titles, there was little or no change: administrator/assistant administrator (4.9 percent in 1977 vs. 4.8 percent in 1980), instructor (4.9 vs. 4.7 percent), nurse anesthetist (1.3 vs. 1.2 percent), nurse clinician (0.7 vs. 0.6 percent), consultant (0.5 vs. 0.6 percent), and researcher/assistant researcher (0.2 vs. 0.2 percent).

5. Functions

During the course of a normal work week, the nurses were asked to indicate what percentage of their time they spent performing certain functions. Of the total of 1,272,852 RNs employed in nursing, 818,138 or 64.3 percent spent at least one-half of their time in direct patient care. More than one out of ten (11.1 percent) spent 50 percent or more of their usual work week in supervisory activities. For 6.5 percent, administrative duties accounted for one-half or more of their work. Only 4.2 percent spent the majority of their time in teaching activities. Even smaller proportions engaged in consultation with agencies and/or professionals or research activities more than one-half of the time (1.5 percent and 0.5 percent, respectively).

Exhibit 31. Principal Position Title of Registered Nurses Employed in Nursing, November 1980.

Title	N	%
Administrator/Assistant Administrator	61,416	4.8
Consultant	7,931	0.6
Supervisor/Assistant Supervisor	76,174	6.0
Instructor	60,323	4.7
Head/Assistant Head Nurse	90,203	7.1
Staff/General Duty Nurse	824,844	64.8
Nurse Practitioner	16,758	1.3
Clinical Specialist	19,070	1.5
Nurse Clinician	8,006	0.6
Nurse Anesthetist	14,580	1.2
Researcher/Assistant Researcher	2,544	0.2
Private Duty Nurse	22,984	1.8
Other	61,473	4.8
Not Known	6,547	0.5
Total	1,272,852	100.0

NOTES: -Includes only registered nurses activity licensed in November 1980 who were employed as a nurse in the United States.
-Because of rounding, sums of the estimated numbers and percents may not add to the totals.

6. Registered Nurses Employed in Temporary Employment Services

Of the 1,272,852 employed RNs, 39,138, or 3.1 percent, were employed primarily and/or secondarily through a temporary employment service (TES). Of those employed through TES, 16,532 (42.2 percent) were employed through TES only primarily, 20,094 (51.3 percent) were employed only secondarily through TES, and 2,512, or 6.4 percent, were employed both primarily and secondarily through TES (see Exhibit 32).

Exhibit 32. Nature of Employment Through Temporary Employment Services (TES) for Registered Nurses Employed Through TES, November 1980

Nature of Employment	N	%
Primarily only	16,532	42.2
Secondarily only	20,094	51.3
Both	2,512	6.4
Total	39,138	100.0

NOTE: Includes only registered nurses actively licensed in November 1980 who were employed as a nurse in the United States.

Hospitals were the predominant employment settings for the estimated 19,044 RNs primarily employed through TES. A total of 12,357 nurses were employed in hospitals through TES, which accounted for 64.9 percent of all nurses employed through TES. Nursing home/extended care settings, ranked second as a primary employment setting, accounting for 12.6 percent of the group, followed by other (10.3 percent), public/community health settings (6.0 percent) and occupational health settings (4.0 percent).

Over one-third (39.0 percent) had a diploma as their highest nursing-related educational preparation (see Exhibit 33). Over one-fourth (30.5 percent) had an associate degree and another one-fourth (26.2 percent) a baccalaureate degree. Only 1,595, or 4.1 percent, had received a nursing-related Masters or Doctorate degree.

Exhibit 33. Highest Nursing-Related Educational Preparation for Registered Nurses Primarily and/or Secondarily Employed Through Temporary Employment Services, November 1980.

Highest Educational Preparation	N	Percent
Diploma	15,260	39.0
Associate	11,920	30.5
Baccalaureate	10,245	26.2
Masters or Doctorate	1,595	4.1
Not Known	120	0.3
Total	39,138	100.0

NOTES: -Includes only registered nurses activly licensed in November 1980 who were employed as a nurse in the United States.
-Because of rounding, sums of the estimated numbers and percents may not add to the totals.

EMPLOYMENT CHARACTERISTICS TABLES

TABLE 14. Principal Employment Setting of Registered Nurses Employed in Nursing, November 1980.

Principal Employment Setting	Nurses Employed in Nursing
a. National Estimate	
Total	1,272,852
Hospital Care	835,647
Nursing Home/Extended Care	101,209
Nursing Education	46,504
Public Health/Community Health	83,440
Student Health Service	44,907
Occupational Health	29,164
Physician's or Dentist's Office	71,974
Private Duty Nursing	20,240
Other Self-Employed	10,853
Other	21,666
Not Known	7,249
b. Percent	
Total	100.0
Hospital Care	65.7
Nursing Home/Extended Care	8.0
Nursing Education	3.7
Public Health/Community Health	6.6
Student Health Service	3.5
Occupational Health	2.3
Physician's or Dentist's Office	5.7
Private Duty Nursing	1.6
Other Self-Employed	0.9
Other	1.7
Not Known	0.6
c. Sample	
Total	23,563
Hospital Care	15,367
Nursing Home/Extended Care	1,890
Nursing Education	928
Public Health/Community Health	1,611
Student Health Service	772
Occupational Health	527
Physician's or Dentist's Office	1,426
Private Duty Nursing	319
Other Self-Employed	207
Other	381
Not Known	135

NOTE: - Because of rounding, sums of estimated numbers and estimated percents may not add to totals.
- Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 15. Principal Employment Setting by Part-Time or Full-Time Employment for Registered Nurses, Employed in Nursing, November 1980.

Principal Employment Setting	Employment Status of Nurses			
	Total	Full-Time	Part-Time	Not Known
a. National Estimate				
Total	1,272,852	854,813	404,943	13,096
Hospital Care	835,647	574,905	255,987	4,755
Nursing Home/Extended Care	101,209	54,283	46,369	558
Nursing Education	46,504	35,547	10,829	129
Public Health/Community Health	83,440	65,449	16,745	1,246
Student Health Service	44,907	32,332	12,214	361
Occupational Health	29,164	23,685	4,343	1,135
Physician's or Dentist's Office	71,974	41,041	30,535	398
Private Duty Nursing	20,240	5,353	14,528	359
Other Self-Employed	10,853	3,699	7,023	131
Other	21,666	15,777	5,823	67
Not Known	7,249	2,743	549	3,957
b. Percent				
Total	100.0	67.2	31.8	1.0
Hospital Care	100.0	68.8	30.6	0.6
Nursing Home/Extended Care	100.0	53.6	45.8	0.6
Nursing Education	100.0	76.4	23.3	0.3
Public Health/Community Health	100.0	78.4	20.1	1.5
Student Health Service	100.0	72.0	27.2	0.8
Occupational Health	100.0	81.2	14.9	3.9
Physician's or Dentist's Office	100.0	57.0	42.4	0.6
Private Duty Nursing	100.0	26.4	71.8	1.8
Other Self-Employed	100.0	34.1	64.7	1.2
Other	100.0	72.8	26.9	0.3
Not Known	100.0	37.8	7.6	54.6
c. Sample				
Total	23,563	15,830	7,497	236
Hospital	15,367	10,551	4,736	80
Nursing Home/Extended Care	1,890	1,028	852	10
Nursing Education	928	725	198	5
Public Health/Community Health	1,611	1,242	347	22
Student Health Service	772	550	218	4
Occupational Health	527	431	82	14
Physician's or Dentist's Office	1,426	826	589	11
Private Duty Nursing	319	82	230	7
Other Self-Employed	207	79	126	2
Other	381	272	107	2
Not Known	135	44	12	79

NOTE: - Because of rounding, sums of estimated numbers and estimated percents may not add to totals.
- Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 16. Highest Nursing-Related Educational Preparation of Registered Nurses Employed in Nursing, November 1980

	Highest Educational Preparation	Employed Nurses
a.	National Estimate	
	Total	1,272,852
	Diploma	645,494
	Associate	256,167
	Baccalaureate	296,202
	Masters	65,224
	Doctorate	2,968
	Not Known	6,797
b.	Percent	
	Total	100.0
	Diploma	50.7
	Associate	20.1
	Baccalaureate	23.3
	Masters	5.1
	Doctorate	0.2
	Not Known	0.5
c.	Sample	
	Total	23,563
	Diploma	11,897
	Associate	4,796
	Baccalaureate	5,521
	Masters	1,173
	Doctorate	53
	Not Known	123

NOTE: - Because of rounding, sums of estimated numbers and estimated percents may not add to totals.
- Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 17. Principal Employment Setting by Highest Nursing-Related Educational Preparation for Nurses Employed in Nursing, November 1980.

Principal Employment Setting	Total	Highest Educational Preparation				
		Diploma	Associate	Baccalaureate	Masters Degree and Above	Not Known
a. National Estimate						
Total	1,272,852	645,494	256,167	296,202	68,192	6,797
Hospital Care	835,647	407,166	199,035	200,879	24,716	3,851
Nursing Home/Extended Care	101,209	71,182	16,923	11,483	1,163	458
Nursing Education	46,504	8,361	2,122	12,228	23,343	450
Public Health/Community Health	83,440	35,191	12,001	28,498	7,595	156
Student Health Service	44,907	20,763	2,903	16,477	4,299	465
Occupational Health	29,164	20,574	3,510	4,036	856	188
Physician's or Dentist's Office	71,974	50,031	10,294	9,528	1,682	440
Private Duty Nursing	20,240	14,179	2,698	2,639	512	212
Other Self-Employed	10,853	4,391	1,777	2,960	1,707	18
Other	21,666	10,706	3,295	5,498	1,926	241
Not Known	7,249	2,951	1,611	1,977	393	318
b. Percent						
Total	100.0	100.0	100.0	100.0	100.0	100.0
Hospital Care	65.7	63.1	77.7	67.8	36.2	56.7
Nursing Home/Extended Care	8.0	11.0	6.6	3.9	1.7	6.7
Nursing Education	3.7	1.3	0.8	4.1	34.2	6.6
Public Health/Community Health	6.6	5.5	4.7	9.6	11.1	2.3
Student Health Service	3.5	3.2	1.1	5.6	6.3	6.8
Occupational Health	2.3	3.2	1.4	1.4	1.3	2.8
Physician's or Dentist's Office	5.7	7.8	4.0	3.2	2.5	6.5
Private Duty Nursing	1.6	2.2	1.1	0.9	0.8	3.1
Other Self-Employed	0.9	0.7	0.7	1.0	2.5	0.3
Other	1.7	1.7	1.3	1.9	2.8	3.6
Not Known	0.6	0.5	0.6	0.7	0.6	4.7

(continued)

TABLE 17. (continued)

Principal Employment Setting	Total	Highest Educational Preparation				
		Diploma	Associate	Baccalaureate	Masters Degree and Above	Not Known
c. Sample						
Total	23,563	11,897	4,796	5,521	1,226	123
Hospital Care	15,367	7,445	3,720	3,711	418	73
Nursing Home/Extended Care	1,890	1,318	318	222	21	11
Nursing Education	928	170	40	253	459	6
Public Health/Community Health	1,611	690	217	552	148	4
Student Health Service	772	379	57	266	63	7
Occupational Health	527	362	72	77	14	2
Physician's or Dentist's Office	1,426	972	217	203	26	8
Private Duty Nursing	319	224	39	46	7	3
Other Self-Employed	207	84	33	57	32	1
Other	381	191	52	101	33	4
Not Known	135	62	31	33	5	4

NOTES: - Because of rounding, sums of estimated numbers and estimated percents may not add to totals.
- Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 18. Type of Agency of Principal Nursing Position for Registered Nurses Employed in Nursing, November 1980

Type of Agency	Nurses Employed in Nursing
a. National Estimate	
Total	1,272,852
Government Agency	223,584
Temporary Employment Service	19,044
Nonprofit Hospital	595,121
Proprietary Hospital	155,767
Other Nongovernment Agency	182,874
Self-employed	40,020
Other	15,374
Not Known	41,068
b. Percent	
Total	100.0
Government Agency	17.6
Temporary Employment Service	1.5
Nonprofit Hospital	46.8
Proprietary Hospital	12.2
Other Nongovernment Agency	14.4
Self-employed	3.1
Other	1.2
Not Known	3.2
c. Sample	
Total	23,563
Government Agency	4,279
Temporary Employment Service	317
Nonprofit Hospital	10,980
Proprietary Hospital	2,767
Other Nongovernment Agency	3,487
Self-employed	694
Other	277
Not Known	762

NOTES: - Because of rounding, sums of estimated numbers and estimated percents may not add to totals.
- Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 19. Principal Position Title by Highest Nursing-Related Educational Preparation of Registered Nurses Employed in Nursing,1/ November 1980

Principal Position Title	Total	Highest Educational Preparation				
		Diploma	Associate	Baccalaureate	Masters Degree and Above	Not Known
a. National Estimate						
Total	1,272,852	645,494	256,167	296,202	68,192	6,797
Administrator/Assistant Administrator	61,416	28,519	5,919	14,685	12,018	274
Consultant	7,931	3,103	688	2,224	1,860	57
Supervisor/Assistant Supervisor	76,174	45,189	13,179	14,720	2,623	462
Instructor	60,323	12,049	4,207	19,326	24,351	391
Head/Assistant Head Nurse	90,203	52,139	16,983	19,555	1,371	154
Staff/General Duty Nurse	824,844	426,669	193,037	190,422	10,640	4,076
Nurse Practitioner	16,758	6,689	1,745	5,012	3,220	93
Clinical Specialist	19,070	6,908	2,875	3,990	5,246	52
Nurse Clinician	8,006	3,496	1,111	2,134	1,218	47
Nurse Anesthetist	14,580	8,005	2,817	3,388	235	135
Researcher/Assistant Researcher	2,544	881	196	771	615	80
Private Duty Nurse	22,984	16,144	3,162	2,992	321	364
Other	61,473	32,457	9,337	15,003	4,148	529
Not Known	6,547	3,247	912	1,979	327	83

TABLE 19. (continued)

Principal Position Title	Total	Highest Educational Preparation				
		Diploma	Associate	Baccalaureate	Masters Degree and Above	Not Known
b. Percent						
Total	100.0	100.0	100.0	100.0	100.0	100.0
Administrator/Assistant Administrator	4.8	4.4	2.3	5.0	17.6	4.0
Consultant	0.6	0.5	0.3	0.8	2.7	0.8
Supervisor/Assistant Supervisor	6.0	7.0	5.1	5.0	3.8	6.8
Instructor	4.7	1.9	1.6	6.5	35.7	5.8
Head/Assistant Head Nurse	7.1	8.1	6.6	6.6	2.0	2.3
Staff/General Duty Nurse	64.8	66.1	75.4	64.3	15.6	60.0
Nurse Practitioner	1.3	1.0	0.7	1.7	4.7	1.4
Clinical Specialist	1.5	1.1	1.1	1.3	7.7	0.8
Nurse Clinician	0.6	0.5	0.4	0.7	1.8	0.7
Nurse Anesthetist	1.2	1.2	1.1	1.1	0.3	2.0
Researcher/Assistant Researcher	0.2	0.1	0.1	0.3	0.9	1.2
Private Duty Nurse	1.8	2.5	1.2	1.0	0.5	5.4
Other	4.8	5.0	3.6	5.1	6.1	7.8
Not Known	0.5	0.5	0.4	0.7	0.5	1.2

TABLE 19. (continued)

Principal Position Title	Total	Highest Educational Preparation				
		Diploma	Associate	Baccalaureate	Masters Degree and Above	Not Known
c. Sample						
Total	23,562	11,897	4,796	5,521	1,226	123
Administrator/Assistant Administrator	1,203	579	123	277	219	5
Consultant	159	69	12	44	33	1
Supervisor/Assistant Supervisor	1,420	852	244	275	41	8
Instructor	1,170	244	75	376	468	7
Head/Assistant Head Nurse	1,625	944	289	359	29	4
Staff/General Duty Nurse	15,205	7,781	3,645	3,528	174	77
Nurse Practitioner	334	132	36	105	60	1
Clinical Specialist	345	127	50	72	95	1
Nurse Clinician	167	78	29	42	17	1
Nurse Anesthetist	305	160	62	72	7	4
Researcher/Assistant Researcher	43	13	5	14	10	1
Private Duty Nurse	361	255	45	51	5	5
Other	1,099	597	158	274	63	7
Not Known	127	66	23	32	5	1

NOTES: -Because of rounding, sums of estimated numbers and estimated percents may not add to totals.
-Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 20. Percentage of Time Spent in Direct Patient Care by Principal Position Title of Registered Nurses Employed in Nursing,1/ November 1980

Principal Position Title	Total	Percentage of Time Spent in Direct Patient Care						
		0	1-24	25-49	50-74	75-99	100%	Not Known
a. National Estimate								
Total	1,272,852	141,468	135,130	127,269	239,868	320,370	257,899	50,847
Administrator/Assistant Administrator	61,416	30,445	22,375	4,212	2,480	341	110	1,453
Consultant	7,931	4,618	1,188	543	834	318	155	276
Supervisor/Assistant Supervisor	76,174	19,260	28,534	13,116	9,659	3,937	339	1,329
Instructor	60,323	43,112	11,383	2,011	1,258	640	719	1,200
Head/Assistant Head Nurse	90,203	3,867	25,337	19,253	21,426	15,821	2,699	1,801
Staff/General Duty Nurse	824,844	16,134	31,992	76,546	178,733	267,107	223,205	31,127
Nurse Practitioner	16,758	546	382	1,298	4,491	8,312	1,416	314
Clinical Specialist	19,070	1,035	2,070	2,360	5,499	5,567	2,073	465
Nurse Clinician	8,006	399	586	1,086	2,604	2,322	926	83
Nurse Anesthetist	14,580	757	438	589	1,562	4,432	6,286	517
Researcher/Assistant Researcher	2,544	1,494	444	266	263	77	0	0
Private Duty Nurse	22,984	121	186	176	677	3,558	15,292	2,973
Other	61,473	19,391	10,116	5,723	10,062	7,621	4,303	4,257
Not Known	6,547	290	99	91	320	319	375	5,053

TABLE 20. (continued)

Principal Position Title	Total	Percentage of Time Spent in Direct Patient Care						
		0	1-24	25-49	50-74	75-99	100%	Not Known
b. Percent								
Total	100.0	11.1	10.6	10.0	18.8	25.2	20.3	4.0
Administrator/Assistant Administrator	100.0	49.6	36.4	6.9	4.0	0.6	0.2	2.4
Consultant	100.0	58.2	15.0	6.8	10.5	4.0	2.0	3.5
Supervisor/Assistant Supervisor	100.0	25.3	37.5	17.2	12.7	5.2	0.4	1.7
Instructor	100.0	71.5	18.9	3.3	2.1	1.1	1.2	2.0
Head/Assistant Head Nurse	100.0	4.3	28.1	21.3	23.8	17.5	3.0	2.0
Staff/General Duty Nurse	100.0	2.0	3.9	9.3	21.7	32.4	27.1	3.8
Nurse Practitioner	100.0	3.3	2.3	7.7	26.8	49.6	8.5	1.9
Clinical Specialist	100.0	5.4	10.9	12.4	28.8	29.2	10.9	2.4
Nurse Clinician	100.0	5.0	7.3	13.6	32.5	29.0	11.6	1.0
Nurse Anesthetist	100.0	5.2	3.0	4.0	10.7	30.4	43.1	3.6
Researcher/Assistant Researcher	100.0	58.7	17.5	10.5	10.3	3.0	0.0	0.0
Private Duty Nurse	100.0	0.5	0.8	0.8	2.9	15.5	66.5	12.9
Other	100.0	31.5	16.5	9.3	16.4	12.4	7.0	6.9
Not Known	100.0	4.4	1.5	1.4	4.9	4.9	5.7	77.2

TABLE 20. (continued)

Principal Position Title	Total	Percentage of Time Spent in Direct Patient Care						
		0	1-24	25-49	50-74	75-99	100%	Not Known
c. Sample								
Total	23,562	2,609	2,513	2,441	4,442	5,981	4,686	891
Administrator/Assistant Administrator	1,203	568	456	90	54	10	3	22
Consultant	159	92	29	11	14	6	2	5
Supervisor/Assistant Supervisor	1,420	325	519	264	197	92	6	17
Instructor	1,170	834	222	44	24	12	12	22
Head/Assistant Head Nurse	1,625	69	445	366	370	293	51	31
Staff/General Duty Nurse	15,205	291	591	1,443	3,319	4,941	4,073	547
Nurse Practitioner	334	8	8	22	88	173	31	4
Clinical Specialist	345	19	42	43	95	99	38	9
Nurse Clinician	167	8	13	22	46	48	25	5
Nurse Anesthetist	305	20	8	12	30	104	118	13
Researcher/Assistant Researcher	43	24	7	6	4	2	0	0
Private Duty Nurse	361	3	3	3	12	58	236	46
Other	1,099	343	168	114	184	137	84	69
Not Known	127	5	2	1	5	6	7	101

NOTES: -Because of rounding, sums of estimated numbers and estimated percents may not add to totals.
-Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 21. Frequency of Performance of Functions in Principal Nursing Position for Employed Registered Nurses Spending 50 Percent or More of Their Time in Direct Patient Care.

Function	Total	Frequency of Carrying Out Function			
		Regularly	Sometimes	Seldom/Never	Not Known
a. National Estimate					
Obtain Health Histories	818,138	430,730	223,156	125,951	38,301
Perform Complete Physicals	818,138	71,264	112,949	578,055	55,870
Perform Portions of Physicals	818,138	213,063	260,628	291,763	52,683
Assist Physician During Exams	818,138	385,007	278,939	118,321	35,872
Manage Selected Problems/Conditions	818,138	238,811	233,409	288,275	57,643
Manage Normal Deliveries	818,138	36,521	31,771	689,385	60,462
Select Treatment Plan	818,138	97,017	221,292	442,215	57,614
Develop Therapeutic Plans	818,138	264,654	272,918	225,458	55,108
Implement Therapy	818,138	399,263	227,938	132,485	58,451
Develop and Modify Medication	818,138	141,979	239,128	376,825	60,206
Administer Medications	818,138	660,315	95,386	32,692	29,745
Support Impaired/Ill During Diagnosis/Therapy	818,138	471,389	178,780	122,876	45,092
Instruct in Management of Defined Illness	818,138	433,696	246,926	96,167	41,349
Instruct in Health Promotion	818,138	391,057	263,311	124,642	39,128
Provide Follow-Through on Case	818,138	250,498	209,678	311,389	46,572
b. Percent					
Obtain Health Histories	100.0	52.6	27.3	15.4	4.7
Perform Complete Physicals	100.0	8.7	13.8	70.7	6.8
Perform Portions of Physicals	100.0	26.0	31.9	35.7	6.4
Assist Physician During Exams	100.0	47.1	34.1	14.5	4.4
Manage Selected Problems/Conditions	100.0	29.2	28.5	35.2	7.0
Manage Normal Deliveries	100.0	4.5	3.9	84.3	7.4
Select Treatment Plan	100.0	11.9	27.0	54.1	7.0
Develop Therapeutic Plans	100.0	32.3	33.4	27.6	6.7
Implement Therapy	100.0	48.8	27.9	16.2	7.1
Develop and Modify Medication	100.0	17.4	29.2	46.1	7.4

TABLE 21. (continued)

Function	Total	Frequency of Carrying Out Function			
		Regularly	Sometimes	Seldom/Never	Not Known
Administer Medications	100.0	80.7	11.7	4.0	3.6
Support Impaired/Ill During Diagnosis/Therapy	100.0	57.6	21.9	15.0	5.5
Instruct in Management of Defined Illness	100.0	53.0	30.2	11.8	5.1
Instruct in Health Promotion	100.0	47.8	32.2	15.2	4.8
Provide Follow-Through on Case	100.0	30.6	25.6	38.1	5.7
c. Sample					
Obtain Health Histories	15,109	8,045	4,051	2,322	691
Perform Complete Physicals	15,109	1,390	2,098	10,615	1,006
Perform Portions of Physicals	15,109	4,092	4,892	5,179	946
Assist Physician During Exams	15,109	7,104	5,073	2,262	670
Manage Selected Problems/Conditions	15,109	4,460	4,356	5,240	1,053
Manage Normal Deliveries	15,109	760	640	12,605	1,104
Select Treatment Plan	15,109	1,846	4,035	8,195	1,033
Develop Therapeutic Plans	15,109	4,777	5,128	4,185	1,019
Implement Therapy	15,109	7,300	4,275	2,456	1,078
Develop and Modify Medication	15,109	2,656	4,409	6,949	1,095
Administer Medications	15,109	12,201	1,792	578	538
Support Impaired/Ill During Diagnosis/Therapy	15,109	8,680	3,321	2,282	826
Instruct in Management of Defined Illness	15,109	7,970	4,599	1,788	752
Instruct in Health Promotion	15,109	7,214	4,829	2,343	723
Provide Follow-Through on Case	15,109	4,572	3,860	5,844	833

NOTES: -Includes only registered nurses actively licensed in November 1980 who were employed as a nurse in the United States.
-Because of rounding, sums of the estimated numbers and percents may not add to the totals.

TABLE 22. Type of Work in Secondary Nursing Position(s) for Pay for Registered Nurses Employed in Nursing, November 1980.

Type of Work	a. National Estimate	b. Percent	c. Sample
Total	143,693	100.0	2,607
Private Duty Nursing	17,155	11.9	272
Temporary Employment Service	22,606	15.7	360
Hospital Staff Nurse	50,295	35.0	951
Teaching	22,068	15.4	400
Consultation	8,083	5.6	154
Other	40,524	28.2	768
Not Known	3,119	2.2	59

NOTES: -Because nurses were able to mark all applicable types of work in their secondary positions, sums of estimated numbers and estimated percents do not add to the total.

-Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

-Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 23. Primary Employment Setting of Registered Nurses Primarily Employed Through Temporary Employment Services (TES), November 1980

Primary Employment Setting	Nurses with Primary Temporary Employment Service Positions
a. National Estimate	
Total	19,044
Hospital	12,357
Nursing Home/Extended Care	2,404
Nursing Education	251
Public Health/Community Health	1,140
Student Health Service	36
Occupational Health	754
Physician's or Dentist's Office	140
Private Duty Nursing	0
Other Self-Employed	0
Other	1,964
Not Known	0
b. Percent	
Total	100.0
Hospital	64.9
Nursing Home/Extended Care	12.6
Nursing Education	1.3
Public Health/Community Health	6.0
Student Health Services	0.2
Occupational Health	4.0
Physician's or Dentist's Office	0.7
Private Duty Nursing	0.0
Other Self-Employed	0.0
Other	10.3
Not Known	0.0
c. Sample	
Total	317
Hospital	200
Nursing Home/Extended Care	42
Nursing Education	4
Public Health/Community Health	24
Student Health Service	1
Occupational Health	14
Physician's or Dentist's Office	2
Private Duty Nursing	0
Other Self-Employed	0
Other	30
Not known	0

NOTES: - Because of rounding, sums of estimated numbers and estimated percents may not add to totals.
- Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 24. Highest Educational Preparation of Registered Nurses by Employment Through Temporary Employment Services, November 1980

Highest Educational Preparation	Nurses with Temporary Employment Service Positions
a. National Estimate	
Total	39,138
Diploma	15,260
Associate	11,920
Baccalaureate	10,245
Masters	1,567
Doctorate	27
Not Known	120
b. Percent	
Total	100.0
Diploma	39.0
Associate	30.5
Baccalaureate	26.2
Masters	4.0
Doctorate	0.1
Not Known	0.3
c. Sample	
Total	638
Diploma	254
Associate	189
Baccalaureate	164
Masters	29
Doctorate	1
Not Known	1

NOTES: - Because of rounding, sums of estimated numbers and estimated percents may not add to totals.
- Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

D. Employment Conditions of Employed Nurses

In this section the number of hours worked by the nurses, their annual earnings and their malpractice insurance coverage are discussed.

1. Annual Hours Worked

Nurses who worked full-time at their principal nursing position worked on the average twice as many hours as did those nurses whose principal positions were part-time jobs. Full time employed nurses were estimated to have an average of 2,032 hours per year as compared to the 1,037 average annual hours indicated by part-time employed nurses.

Nurses employed full-time in occupational health programs, hospitals, and nursing homes/extended care facilities and those nurses who were self-employed (other than private duty nursing) tended to work more than the average number of hours per year. School nurses and nurse educators averaged the lowest number of hours per year (see Exhibit 34). By type of position the full-tme nurse anesthetist worked on the average the most hours per year (2,183 hours). The administrator/assistant administrator averaged the next highest at 2,121 hours per year. Instructors and researchers had the lowest averaged hours worked per year. For full time employees those with doctorates averaged the highest number of hours per year (2,167 hours) while those with a master in nursing related field averaged the lowest (1,920 hours).

Exhibit 34. Average Annual Hours Worked by Field of Employment

Field of Employment	Average Hours Worked Per Year	
	Full-Time Employee	Part-Time Employee
Total	2,032	1,037
Hospital	2,070	1,085
Nursing home or extended care facility	2,057	1,058
Nursing education	1,847	817
Public/community health	2,027	1,002
School nurse	1,523	796
Occupational health	2,074	879
Physician or dentist office	1,985	992
Private duty nursing	2,020	835
Other self-employed	2,048	641
Other	2,111	956

NOTE: -Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

2. Annual Salaries

The average annual salary for nurses employed full time was $17,394. These salaries varied geographically. Full-time employed nurses in the Pacific Census Division which includes Alaska, California, Hawaii, Oregon and Washington received the highest average annual salary ($19,887) from their principal nursing position. Nurses in the East South Central Census Division (Alabama, Kentucky, Mississippi, and Tennessee) had the lowest annual wages ($16,378). On the whole, annual salaries tend to be higher in the West than they were in the eastern part of the United States (see Exhibit 35).

Exhibit 35. Average Salary by Geographic Region

Census Division	States in Census	Average Annual Salary From Principal Position of Full-Time Employed Nurses
Total		$17,394
New England	Connecticut, Maine, Massachusetts New Hampshire, Rhode Island, Vermont	$16,603
Middle Atlantic	New York, New Jersey, Pennsylvania	$16,857
South Atlantic	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia	$16,534
East South Central	Alabama, Kentucky, Mississippi, Tennessee	$16,378
East North Central	Illinois, Indiana, Michigan, Ohio, Wisconsin	$17,728
West South Central	Arkansas, Louisiana, Oklahoma, Texas	$17,634
West North Central	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	$16,989
Mountain	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	$17,448
Pacific	Alaska, California, Hawaii, Oregon, Washington	$19,887

NOTE: -Includes only registered nurses actively licensed and employed full-time as a nurse in the United States in November 1980.

Full-time employed nurses with higher educational preparation had higher average annual salaries from their principal positions. Those with doctorates received on the average $27,702 per year. Those with masters degrees earned about $22,000 and nurses with a baccalureate in nursing earned approximately $17,400. Nurses with a baccalaureate in a nursing related area received on the average about $19,000. Diploma nurses and associate degree nurses received about $17,000 and $16,500 respectively (see Exhibit 36).

Exhibit 36. Average Annual Salary by Highest Educational Preparation for Nurses Working Full-Time

Highest Educational Preparation	Average Annual Salary From Principal Position for Full-Time Nurses
Total	$ 17,394
Diploma	$ 17,009
Associate Degree	$ 16,469
Baccalaureate in Nursing	$ 17,436
Baccalaureate in Other Field	$ 19,029
Masters in Nursing	$ 21,889
Masters in Other Field	$ 22,151
Doctorate	$ 27,702

NOTE: -Includes only registered nurses actively licensed and employed full-time as a nurse in the United States in November 1980.

The $27,970 average earnings for nurses who were self-employed (other than in private duty nursing) was the highest average while the salaries for nurses in nursing education was next highest ($19,257). Nurses working in a physician's or dentist office had the lowest average salaries at $13,286 (see Exhibit 37).

Exhibit 37. Average Annual Salary by Field of Employment for Nurses Working Full-Time

Field of Employment	Average Annual Salary From Principal Position for Full-Time Nurses
Total	$ 17,394
Hospital	$ 17,797
Nursing Home of Extended Care Facility	$ 15,617
Nursing Education	$ 19,257
Public/Community Health	$ 16,750
School Nurse	$ 15,060
Occupational Health	$ 18,749
Physician or Dentist Office	$ 13,286
Private Duty Nursing	$ 14,337
Other Self-Employed	$ 27,970
Other	$ 19,130

NOTE: -Includes only registered nurses actively licensed and employed full-time as a nurse in the United States in November 1980.

When salaries were compared by position title, nurse anesthetists indicated an average annual salary of $28,782 which was much higher than received for any other category. Private duty nurses reported the lowest average annual earnings ($14,455) from their principal position with researchers reporting the next lowest salary ($15,981). A detailed listing of position titles by annual salary is provided in Exhibit 38.

Exhibit 38. Average Salary by Type of Position for Nurses Working Full-Time

Type of Position	Average Annual Salary From Principal Position for Full-Time Nurses
Total	$ 17,394
Administrator/Assistant Administrator	$ 21,425
Consultant	$ 19,990
Supervisor	$ 18,772
Instructor	$ 18,804
Head Nurse	$ 18,384
Staff Nurse	$ 16,060
Nurse Practitioner	$ 19,292
Clinical Specialist	$ 18,707
Nurse Clinician	$ 19,276
Nurse Anesthetist	$ 28,782
Researcher	$ 15,981
Private Duty Nurse	$ 14,455
Other	$ 17,837

NOTE: -Includes only registered nurses actively licensed and employed full-time as a nurse in the United States in November 1980.

As would be expected, full-time employed nurses who had more than one nursing position had, on the average, higher annual earnings from working than did nurses who only had one job. Nurses were asked to indicate their annual earnings for their principal position and those who had one or more additional positions were asked to provide their total annual earnings from their other nursing position(s). While 27.2 percent of those who had only one nursing job earned less than $15,000 annually, only 19.0 percent of those with more than one position were in that salary range. Almost three-fourths (72.0 percent) of nurses with one position earned less than $20,000 and with an additional 18.8 percent of earning between $20,000 and $25,000 annually. Of nurses with at least one secondary position 54.9 percent had salaries of less than $20,000 and 23.6 percent of the total population of nurses with more than one position earned between $20,000 and $25,000. While 10.1 percent of the nurses with multiple positions earned between $25,000 and $30,000 annually, less than 5 percent of their counterparts with single positions had salaries in this range. Only 1.4 percent of the nurses with one position grossed more than $30,000 annually as compared to the nurses with more than one position where 8.6 percent of the nurses were in the category (see Exhibit 39).

Exhibit 39. Distribution of Annual Earnings for Nurses

Annual Earnings	Full-Time Employed Nurse With Only One Position		Full-Time Employed Nurse With More Than One Position	
	Number	Percent	Number	Percent
Total	762,727	100.0	91,173	100.0
$ 0 to 4,999	5,483	0.7	757	0.8
$5,000 to 9,999	15,446	2.0	906	1.0
$10,000 to 14,999	187,185	24.5	15,672	17.2
$15,000 to 19,999	341,733	44.8	32,727	35.9
$20,000 to 24,999	143,810	18.8	21,520	23.6
$25,000 to 30,000	33,900	4.4	9,216	10.1
Over $30,000	10,584	1.4	7,821	8.6
Not Known	24,585	3.2	2,555	2.8

NOTES: -Includes only registered nurses actively licensed and employed full-time as a nurse in the United States in November 1980.
-Because of rounding, sums of the estimated numbers and percents may not add to total.

3. Malpractice Insurance Coverage

Of the 1.27 million nurses employed in nursing, 35.0 percent or 445,689 carried malpractice insurance exclusive of that which their employer carried. Self-employed nurses were more likely to carry their own policies than were those who work for any type of agency. Over 44 percent, or 17,703, of self-employed nurses carried malpractice insurance. The percent of nurses with malpractice insurance ranged from 30.2 percent to 44.2 percent depending on the type of agency for which the nurse worked as indicated in Exhibit 40.

The proportion of nurses who had malpractice insurance coverage also varied by employment setting. Nurses employed in education programs had the highest rate of coverage with 63.9 percent reporting having policies. Self-employed nurses also had a high rate of coverage. Half of the private duty nurses (50.1 percent) and 42.5 percent of other self-employed nurses carried malpractice insurance. Thirty-five percent of hospital nurses and one-quarter (25.4 percent) of nursing home and extended care facility nurses had malpractice insurance policies (see Exhibit 41).

Only one-third of those nurses who spend more than half of their time in direct patient care had malpractice insurance. Nurses who spent more than half their time in teaching nursing (or other students in health care occupations) had the highest percentage (58.6 percent) of nurses with malpractice insurance.

Exhibit 40. Malpractice Insurance by Employment Agency For Nurses Employed in the United States in November 1980

Agency of Principal Nursing Position	Number of Employed Nurses	Number of Nurses in Agency Carrying Malpractice Insurance	Percent of Nurses in Agency Carrying Malpractice Insurance
Total	1,272,852	445,689	35.0
Government Agency	223,584	84,089	37.6
Temporary Employment Service	19,044	6,364	33.4
Nonprofit Hospital	595,121	215,551	36.2
Proprietary Hospital	155,767	48,492	31.1
Other Nongovernment Agency	182,874	55,283	30.2
Self-Employed	40,020	17,703	44.2
Other	15,374	5,376	35.0
Not Known	41,068	12,832	31.3

NOTE: -Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.
-Because of rounding, sums of the estimated numbers may not add to totals.

Exhibit 41. Malpractice Insurance Coverage by Field of Employment For Nurses Employed in the United States in November 1980

Field of Employment	Number of Employed Nurses	Number of Nurses in Field of Employment Carrying Malpractice Insurance	Percent of Nurses in Field of Employment Carrying Malpractice Insurance
Total	1,272,852	445,689	35.0
Hospital	835,647	291,063	34.8
Nursing Home or Extended Care Facility	101,209	25,675	25.4
Nursing Education	46,504	29,701	63.9
Public/Community Health	83,440	33,202	39.8
School Nurse	44,907	16,840	37.5
Occupational Health	29,164	8,838	30.3
Physician/Dentist Office	71,974	19,271	26.8
Private Duty Nursing	20,240	10,140	50.1
Other Self-Employed	10,853	4,608	42.5
Other	21,666	5,126	23.7
Not Known	7,249	1,224	16.9

NOTE: -Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.
-Because of rounding, sums of the estimated numbers may not add to totals.

MALPRACTICE INSURANCE TABLES

TABLE 25. Malpractice Insurance of Registered Nurses by Agency of Principal Position for Nurses Employed in United States in November 1980

Malpractice Insurance Coverage	Agency								
	Total	Government Agency	Temporary Employment	Nonprofit Hospital	Proprietary Hospital	Non-Government Other	Self-Employed	Other	Not Known
a. National Estimate									
Total	1,272,852	223,584	19,044	595,121	155,767	182,874	40,020	15,374	41,068
Yes	445,689	84,089	6,364	215,551	48,492	55,283	17,703	5,376	12,832
No	794,840	134,746	11,976	368,792	103,123	122,918	21,280	9,608	22,398
Not known	32,323	4,749	705	10,778	4,152	4,673	1,037	391	5,838
b. Percent									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yes	35.0	37.6	33.4	36.2	31.1	30.2	44.2	35.0	31.3
No	62.5	60.3	62.9	62.0	66.2	67.2	53.2	62.5	54.5
Not known	2.5	2.1	3.7	1.8	2.7	2.6	2.6	2.5	14.2
c. Sample									
Total	23,563	4,279	317	10,980	2,767	3,487	694	277	762
Yes	8,505	1,667	105	4,105	893	1,094	296	101	244
No	14,484	2,521	202	6,695	1,802	2,311	379	169	405
Not known	574	91	10	180	72	82	19	7	113

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 26. Malpractice Insurance of Registered Nurses Employed in the United States by Field of Employment, November 1980

	Total	Hospital	Nursing Home/ Extended Care	Nursing Education	Public/ Community Health	School	Occupa- tional Health	Physician, Dentist Office	Private Duty	Other Self- Employed	Other	Not Known
a. National Estimate												
Total	1,272,852	835,647	101,209	46,504	83,440	44,907	29,164	71,974	20,240	10,853	21,666	7,249
Yes	445,689	291,063	25,675	29,701	33,202	16,840	8,838	19,271	10,140	4,608	5,126	1,224
No	794,840	527,903	72,091	15,370	47,900	26,912	19,425	51,228	9,431	5,991	15,972	2,616
Not known	32,323	16,680	3,443	1,433	2,339	1,155	901	1,475	668	254	568	3,408
b. Percent												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yes	35.0	34.8	25.4	63.9	39.8	37.5	30.3	26.8	50.1	42.5	23.7	16.9
No	62.5	63.2	71.2	33.1	57.4	59.9	66.6	71.2	46.6	55.2	73.7	36.1
Not known	2.5	2.0	3.4	3.1	2.8	2.6	3.1	2.1	3.3	2.3	2.6	47.0
c. Sample												
Total	23,562	15,367	1,890	928	1,611	772	527	1,426	319	207	381	135
Yes	8,505	5,492	496	602	672	312	172	398	147	98	96	20
No	14,484	9,590	1,332	299	898	444	342	993	160	105	278	43
Not known	574	285	62	27	41	16	13	35	12	4	7	72

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

TABLE 27. Malpractice Insurance Coverage of Registered Nurses Employed in the United States by Function, November 1980

Malpractice Insurance Coverage	Type of Function (More Than 50% of time)			
	Administration	Direct Patient Care	Supervision	Teaching
a. National Estimate				
Total	83,255	818,138	141,189	53,304
Yes	30,810	276,144	47,222	31,220
No	50,585	528,648	90,707	20,520
Not Known	1,860	13,345	3,260	1,563
b. Percent				
Total	100.0	100.0	100.0	100.0
Yes	37.0	33.8	33.4	58.6
No	60.8	64.6	64.2	38.5
Not Known	2.2	1.6	2.3	2.9
c. Sample				
Total	1,597	15,109	2,653	1,018
Yes	637	5,221	915	610
No	926	9,656	1,689	383
Not Known	34	232	49	25

NOTES: -Because of rounding, sums of estimated numbers and percents may not add to totals.
-Includes only registered nurses actively licensed and employed as a nurse in the United States in November 1980.

E. Nurses Not Employed in Nursing

Nurses not employed in nursing may be unemployed or employed in another field. Whether or not employed they may be seeking employment as a nurse. These aspects of nursing are discussed in this section.

1. Employment Status of Nurses Not Employed in Nursing

It was stated in section IV.A that 388,537 or 23.4 percent of the nurses in the U. S. were not employed in nursing. Of these 388,537 nurses, 77.4 percent were not employed, 19.5 percent were employed in nonnursing jobs and for 3.1 percent the nonnursing employment status was not known. Of the 75,665 nurses employed in nonnursing positions 31.7 percent were employed in health-related jobs and 65.9 percent were employed in nonhealth-related positions.

The length of time since the nurses not employed in nursing last worked for pay as a registered nurse is shown in Exhibit 42. In interpreting the numbers in the Exhibit the change in scale for the "years since working as RN" should be noted. The number of nurses who were employed within the last year was 64,820 or 16.7 percent. Almost half (45.6) of the nurses have not been working as registered nurses for 5 or more years with over a quarter (27.6 percent) of the nurses not working as a RN for over 9 years.

Exhibit 42. Years Since Last Worked For Pay as a Registered Nurse.

Years Time Since Working as RN	Number	Percent
Total	388,537	100.0
Less than 1 year	64,820	16.7
1 to 4	116,557	30.0
5 to 9	69,883	18.0
10 to 19	60,258	15.5
20 to 29	27,275	7.0
30 and over	19,813	5.1
Not Known	29,931	7.7

NOTES: -Includes only registered nurses actively licensed who were not employed in nursing but lived in the United States in November 1980.
-Because of rounding, sums of the estimated numbers and percents may not add to totals.

Four out of five (79.7 percent) of the 388,537 nurses not employed in nursing were married, 12.4 percent were widowed, divorced or separated, 7.3 percent were never married, while for 0.6 percent the marital status was not known. The biggest difference in the marital status distribution between this population and the total nurse population was for the married and the never married nurses. The married nurses were 70.6 percent of all nurses while they were 79.7 percent for those not working as nurses. The never married nurses were 14.8 percent of the nurse population and 7.3 percent of the nurses not

employed as nurses. Exhibit 43 indicates the marital status distribution for the total licensed nurse population and those not employed as nurses. Note that the percentage of married nurses with young children at home was not much higher for those nurses not employed in nursing then it was for the nurse population as a whole.

2. Nurses Seeking Employment

Of the 388,537 nurses living in the U. S. who are not employed in nursing only 32,784 or 8.4 percent of the nurses were actively seeking employment and of these only 8,884 were seeking full-time employment (see Exhibit 44). So of all of the nurses not employed in nursing only 2.3 percent were seeking full-time employment with an additional 5.8 percent searching for

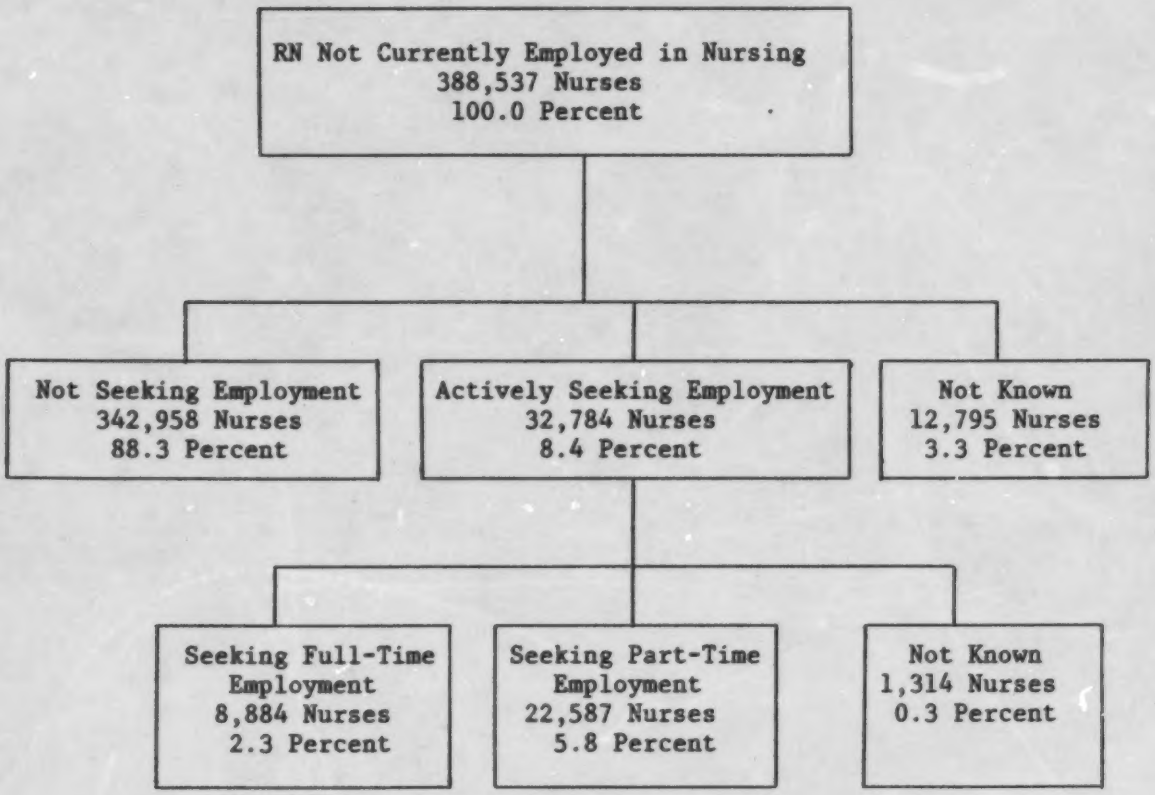
Exhibit 43. Marital Status for Total Nurse Population and Nurses Not Employed as Nurses

Marital Status	Percent of Total Nurse Population	Percent of Nurses Not Employed as Nurses
Married	70.6	79.7
No children at home	23.0	27.4
All children at home less than 6	11.9	12.3
All children at home 6 or older	27.8	29.8
Some children at home are under 6, others are 6 or older	7.5	9.4
Status of children not known	0.4	0.9
Widowed, Divorced, Separated	13.8	12.4
Never Married	14.8	7.3
Not Known	0.8	0.6
Total	100.0	100.0

NOTES: - Includes only registered nurses actively licensed 1980 who indicated they were not employed in nursing and lived in the United States in November 1980.

- Because of rounding, estimated percents may not add to totals.

Exhibit 44. Nurses Not Employed in Nursing But Seeking Employment in Nursing



part-time employment. An additional 0.3 percent of the nurses not employed in nursing were seeking employment but it was not known if it was full-time or part-time employment they were seeking. Over one half (52.0 percent) of the nurses had been searching for employment 4 weeks or less as can be seen in Exhibit 45.

Exhibit 45. The Amount of Time Nurses Have Been Seeking Employment

Number of Weeks Actively Seeking Employment	Number of Nurses	Percent of Nurses
Less than 1 week	7,042	21.5
1-4	10,009	30.5
5-9	4,833	14.7
10-14	2,624	8.0
15-19	759	2.3
20-24	1,154	3.5
25-29	404	1.2
30-51	598	1.8
52 and over	1,129	3.4
Not Known	4,234	12.9
Total	32,784	100.0

NOTE: -Includes only registered nurses actively licensed who were not employed in nursing but lived in the United States in November 1980.

In 1980 the 8.4 percentage of nurses not employed in nursing who were actively seeking employment was less than 9.9 percent reported in 1977. In addition to the percentage being less, the estimated number of nurses seeking employment in 1980 was less than in 1977--32,784 nurses in 1980 compared to 42,028 nurses in 1977.

More nurses were seeking part-time rather than full-time positions in nursing. About 68.9 percent or 22,587 of the nurses seeking employment were seeking part-time employment while 8,884 or 27.1 percent were trying to obtain a full-time position (4.0 percent did not respond).

The distribution of the highest nursing-related educational preparation of nurses not employed in nursing and actively seeking a nursing position was only slightly different than the composition of the total registered nurse population (see Exhibit 46). Though the diploma nurse accounts for 17,589 or 53.7 percent of the nurses seeking employment it is in line with their representation in the total nurse population.

Exhibit 46. Nurses Not Employed in Nursing and Actively Seeking Employment in Nursing by Highest Educational Preparation

Highest Educational Preparation	Nurses Seeking Employment		Percent of Total Nursing Population
	Number	Percent	
Diploma	17,589	53.7	54.3
Associate Degree	4,915	15.0	17.8
Baccalaureate in Nursing or related field	8,332	25.4	22.1
Masters or Doctorate in Nursing or related field	1,932	5.9	5.2
Not Known	16	0.1	0.6
Total	32,784	100.0	100.0

NOTES: -Includes only registered nurses actively licensed who were not employed in nursing but lived in the United States in November 1980.

- Because of rounding sums of estimated numbers and estimated percents may not add to totals.

Of the nurses actively seeking employment 26,395 or 80.5 percent were married, 3,694 (11.3 percent) were widowed, divorced or separated and 2,292 or 7.0 percent had never married (1.2 percent did not respond). The marital status distribution of nurses seeking employment was similar to the distribution of all nurses not employed as nurses (see Exhibit 43).

Married nurses were primarily seeking part-time employment, while nurses who have never married were primarily seeking full-time employment (see Exhibit 47). Those nurses who were widowed, divorced or separated were more equally divided between seeking full-time and part-time employment.

Exhibit 47. Marital Status of Nurses Not Employed as Nurses and are Seeking Nursing Employment

Marital Status	Number of Nurses	Percent of Nurses Seeking Employment			
		Full-Time	Part-Time	No Response	Total
Married	26,395	19.3	76.8	3.9	100.0
No children at home	5,598	30.1	65.5	4.4	100.0
All children at home under 6	5,339	14.1	85.9	0	100.0
All children at home 6 or older	12,527	19.5	76.9	3.6	100.0
Children at home are under 6 and 6 and older	2,664	7.7	79.9	12.4	100.0
Children status not known	267	0	100.0	0	100.0
Widowed, Divorced, Separated	3,694	55.2	41.3	3.5	100.0
Never Married	2,292	67.5	25.7	6.8	100.0
No Response	403	53.0	47.0	0	100.0
Total	32,784	27.1	68.9	4.0	100.0

NOTES: - Includes only registered nurses actively licensed who were not employed in nursing but lived in the United States in November 1980.

- Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

NURSES NOT EMPLOYED IN NURSING TABLES

TABLE 28. Full-Time and Part-Time Employment for Nurses Not Employed in Nursing but Employed in a Health-Related or Nonhealth Related Position

	Full- or Part-Time Employment	Total	Employment Health Related	Employment Nonhealth Related	No Response
a.	National Estimate				
	Total	75,665	24,011	49,883	1,771
	Full-Time	43,610	16,468	26,754	388
	Part-Time	30,261	7,412	22,811	38
	No Response	1,794	131	318	1,345
b.	Percent				
	Total	100.0	100.0	100.0	100.0
	Full-Time	57.6	68.6	53.6	21.9
	Part-Time	40.0	30.9	45.7	2.2
	No Response	2.4	0.6	0.6	75.9
c.	Sample				
	Total	1,354	417	903	34
	Full-Time	787	286	494	7
	Part-Time	530	130	399	1
	No Response	37	1	10	26

NOTES: - Includes only registered nurses actively licensed in November 1980 and living in the United States.
- Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

TABLE 29. Nurses Seeking Employment by Age Group and Type of Employment Being Sought--Full- or Part-Time

Full- or Part-Time Employment	Total	Age Group										
		Less than 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 or Older	No Response
a. National Estimate												
Total	32,784	1,032	5,538	4,913	5,508	4,207	3,773	3,023	2,273	1,173	861	483
Full-Time	8,884	628	1,606	899	1,075	1,106	1,174	1,350	906	59	0	82
Part-Time	22,587	368	3,885	3,865	4,159	2,916	2,386	1,424	1,367	1,065	781	370
No Response	1,314	36	47	148	274	185	213	250	0	50	80	31
b. Percent												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Full-Time	27.1	60.8	29.0	18.3	19.5	26.3	31.1	44.7	39.9	5.0	0.0	17.0
Part-Time	68.9	35.7	70.2	78.7	75.5	69.3	63.2	47.1	60.1	90.8	90.7	76.7
No Response	4.0	3.5	0.9	3.0	5.0	4.4	5.7	8.4	0.0	4.2	9.3	6.3
c. Sample												
Total	591	17	108	90	90	74	68	59	42	20	13	10
Full-Time	178	9	34	19	20	20	24	31	17	2	0	2
Part-Time	390	7	73	68	67	49	40	25	25	17	12	7
No Response	23	1	1	3	3	5	4	3	0	1	1	1

NOTES: - Includes only registered nurses actively licensed in November 1980 and living in the United States.
- Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

TABLE 30. Nurses Seeking Full- or Part-Time Employment by Marital Status

Seeking Full- or Part-Time Employment	Total	Marital Status: Married: No Children at Home	Married: All Children at Home Less Than 6	Married: All Children at Home 6 or Older	Married: Children at Home Under 6 and 6 and Older	Married: Children Status Not Known	Widowed Divorced, Separated	Never Married	No Response
a. National Estimate									
Total	32,784	5,598	5,339	12,527	2,664	267	3,694	2,292	403
Full-Time	8,884	1,686	755	2,440	205	0	2,037	1,547	214
Part-Time	22,587	3,666	4,584	9,637	2,128	267	1,527	589	189
No Response	1,314	246	0	451	331	0	130	156	0
b. Percent									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Full-Time	27.1	30.1	14.2	19.5	7.7	0	55.2	67.5	53.0
Part-Time	68.9	65.5	85.9	76.9	79.9	100.0	41.3	25.7	47.0
No Response	4.0	4.4	0	3.6	12.4	0	3.5	6.8	0
c. Sample									
Total	591	115	97	215	45	3	71	39	6
Full-Time	178	43	12	46	4	0	42	29	2
Part-Time	390	67	85	160	36	3	27	8	4
No Response	23	5	0	9	5	0	2	2	0

NOTES: - Includes only registered nurses actively licensed in November 1980 and living in the United States.
- Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

TABLE 31. Nurses Seeking Employment by Highest Nursing Educational Preparation and Time Seeking Employment.

Weeks Seeking Employment	Total	Highest Nursing Educational Preparation: Diploma	Associate Degree	Baccalaureate in Nursing or Related Field	Masters or Doctorate in Nursing or Related Field	Not Known
a. National Estimate						
Total	32,784	17,589	4,915	8,332	1,932	16
Less than a week	7,042	3,950	1,134	1,648	295	16
1-4	10,009	5,480	1,303	2,442	784	0
5-9	4,833	2,185	1,198	1,380	70	0
10-14	2,624	1,669	278	564	112	0
15 or more	4,044	2,100	46	1,342	556	0
Not known	4,234	2,205	957	957	115	0
b. Percent						
Total	100.0	100.0	100.0	100.0	100.0	100.0
Less than a week	21.5	22.5	23.1	19.8	15.3	100.0
1-4	30.5	31.2	26.5	29.3	40.6	0
5-9	14.7	12.4	24.4	16.6	3.6	0
10-14	8.0	9.5	5.7	6.8	5.8	0
15 or more	12.3	11.9	0.7	16.1	28.8	0
Not known	12.9	12.5	19.5	11.5	5.9	0
c. Sample						
Total	591	305	97	148	40	1
Less than a week	141	74	23	36	7	1
1-4	175	93	27	41	14	0
5-9	85	38	22	22	3	0
10-14	52	29	9	10	4	0
15 or more	74	40	3	21	10	0
Not known	64	31	13	18	2	0

NOTES: - Includes only registered nurses actively licensed in November 1980 and living in the United States.
- Because of rounding, sums of estimated numbers and estimated percents may not add to totals.

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APPENDIX A

Questionnaire

A-3
OMB No. 68-S80022
Expiration Date: June, 1981

NATIONAL SAMPLE SURVEY OF REGISTERED NURSES

Dear R.N.:

This survey is being conducted by the Research Triangle Institute under a contract with the Bureau of Health Professions, HRA, PHS, U.S. Department of Health and Human Services. All your responses are very important to the accuracy of our research. In addition, they are confidential and completely voluntary. The information is for statistical purposes only and will not be connected with your name.

This study is being carried out to assist with the data requirements for reports to Congress of Section 951 of PL 94-63, which requires that data be gathered, on a continuing basis, on the number and distribution of nurses; and Section 708 of PL 94-484 which requires that there be collection systems and analytical studies on the supply of health professions, including registered nurses.

The questionnaire has been divided into four sections. These sections are designed to gather information on (1) your educational background as a registered nurse, (2) your employment status in nursing, (3) your employment status if you are not currently employed in nursing, and (4) general information.

Please read and follow all instructions carefully and answer all questions unless otherwise instructed. Return the completed questionnaire in the postage-paid envelope enclosed in this package at your earliest convenience. If possible, we suggest you complete it now while you have it in your hand.

Thank you for your cooperation. Your efforts are highly appreciated.

IF YOU HAVE RECEIVED MORE THAN ONE COPY OF THE QUESTIONNAIRE, PLEASE RETURN THE EXTRA COPY(S) ALONG WITH THE COMPLETED QUESTIONNAIRE.

PLACE

LABEL

HERE

FOR OFFICE USE ONLY

Research Triangle Institute, P.O. Box 12036, Research Triangle Park, N.C. 27709

3027-ODF-54321

NOTE: Your responses will be read by an optical mark reader. Please review the following marking directions and examples before completing this questionnaire.

MARKING DIRECTIONS

- Use a black lead pencil only (No. 2 or 2½).
- Make heavy dark marks that fill the circle completely.
- Erase clearly any response you wish to change.
- Make no stray marks of any kind on this sheet; write only in places provided.
- Carefully review the examples provided below on how to complete number and word responses.

MARKING EXAMPLES:

- Fill in circles completely

Proper mark ⟶ ●○○○

Improper marks ⟶ ✓ ✗ ⊙ ◐

- Written Responses

If written responses are requested, please keep your comments within the boxed area provided. ⟶ [ ]

- Number grids

If you are asked to give numbers for your answer, please record as shown below.

If your answer is 150 ⟶

0	1	5	0
●	0	0	●
1	●	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	●	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

— Write the numbers in the boxes, making sure the last number is always placed in the right-hand box.

— Fill in the unused boxes with zeros.

— Then, mark the matching circle below each box.

- Example of date grid

(if March 1962)

Month		Year	
0	3	6	2
●	0	0	0
1	1	1	1
	2	2	●
	●	3	3
	4	4	4
	5	5	5
	6	●	6
	7	7	7
	8	8	8
	9	9	9

SECTION A
EDUCATION BACKGROUND AS A REGISTERED NURSE

1. Please indicate (a) the Basic Nursing Education, which prepared you to become a registered nurse; (b) specify the month and year of graduation; and (c) specify the state (or country if not U.S.) in which you received your Basic Nursing Education.

a. Basic Nursing Education
(Mark only one)

- ○ Diploma
- ○ Associate Degree
- ○ Baccalaureate
- ○ Master's

b. Date of Graduation

Month		Year	
0	0	0	0
1	1	1	1
	2	2	2
	3	3	3
	4	4	4
	5	5	5
	6	6	6
	7	7	7
	8	8	8
	9	9	9

Write the number in the boxes.

Then, mark the matching circle below each box.

(See example on page 2.)

c. State (or country, if not U.S.) of Basic Nursing Education

- ○ Ala.
- ○ Ak.
- ○ Ariz.
- ○ Ark.
- ○ Calif.
- ○ Colo.
- ○ Conn.
- ○ Del.
- ○ D.C.
- ○ Fl.
- ○ Ga.
- ○ Hi.
- ○ Id.
- ○ Ill.
- ○ Ind.
- ○ Iowa
- ○ Kan.
- ○ Ken.
- ○ La.
- ○ Maine
- ○ Mass.
- ○ Md.
- ○ Mich.
- ○ Minn.
- ○ Miss.
- ○ Mo.
- ○ Mont.
- ○ Neb.
- ○ Nev.
- ○ N.H.
- ○ N.J.
- ○ N.M.
- ○ N.Y.
- ○ N.C.
- ○ N.D.
- ○ Ohio
- ○ Ok.
- ○ Ore.
- ○ Penn.
- ○ R.I.
- ○ S.C.
- ○ S.D.
- ○ Tenn.
- ○ Tex.
- ○ Utah
- ○ Vt.
- ○ Va.
- ○ Wash.
- ○ W. Va.
- ○ Wis.
- ○ Wy.

- ○ Canada
- ○ Philippines
- ○ Puerto Rico
- ○ Virgin Islands
- ○ Guam
- ○ England
- ○ West Indies
- ○ Thailand
- ○ Other (specify)

2. Since graduation from the Basic Nursing Education Program, which you indicated in question 1, have you received any additional degrees?

- ○ Yes (go to questions 3 and 4)
- ○ No (go to question 5)

3. For all additional academic degrees you have received since graduation from your basic nursing program, please indicate in the spaces provided below (a) the type of degree; (b) whether or not the degree is related to your nursing career; (c) the month and year received; and (d) the state (or country, if not U.S.) in which the degree was received.

(a) Type of Degree	**(a) Type of Degree**	**(a) Type of Degree**	**(a) Type of Degree**
○ Associate degree in nursing	○ Associate degree in another field	○ Baccalaureate in nursing	○ Baccalaureate in another field
	(b) Is this degree related to your nursing career?		**(b) Is this degree related to your nursing career?**
	○ Yes ○ No		○ Yes ○ No
(c) Month/Year Received	**(c) Month/Year Received**	**(c) Month/Year Received**	**(c) Month/Year Received**
DATE (Month / Year)	DATE (Month / Year)	DATE (Month / Year)	DATE (Month / Year)
(d) State or Country	**(d) State or Country**	**(d) State or Country**	**(d) State or Country**
Ala. Ak. Ariz. Ark. Calif. Colo. Conn. Del. D.C. Fl. Ga. Hi. Id. Ill. Ind. Iowa Kan. Ken. La. Maine Mass. Md. Mich. Minn. Miss. Mo.	Ala. Ak. Ariz. Ark. Calif. Colo. Conn. Del. D.C. Fl. Ga. Hi. Id. Ill. Ind. Iowa Kan. Ken. La. Maine Mass. Md. Mich. Minn. Miss. Mo.	Ala. Ak. Ariz. Ark. Calif. Colo. Conn. Del. D.C. Fl. Ga. Hi. Id. Ill. Ind. Iowa Kan. Ken. La. Maine Mass. Md. Mich. Minn. Miss. Mo.	Ala. Ak. Ariz. Ark. Calif. Colo. Conn. Del. D.C. Fl. Ga. Hi. Id. Ill. Ind. Iowa Kan. Ken. La. Maine Mass. Md. Mich. Minn. Miss. Mo.
Mont. Neb. Nev. N.H. N.J. N.M. N.Y. N.C. N.D. Ohio Ok. Ore. Penn. R.I. S.C. S.D. Tenn. Tex. Utah Vt. Va. Wash. W. Va. Wis. Wy.	Mont. Neb. Nev. N.H. N.J. N.M. N.Y. N.C. N.D. Ohio Ok. Ore. Penn. R.I. S.C. S.D. Tenn. Tex. Utah Vt. Va. Wash. W. Va. Wis. Wy.	Mont. Neb. Nev. N.H. N.J. N.M. N.Y. N.C. N.D. Ohio Ok. Ore. Penn. R.I. S.C. S.D. Tenn. Tex. Utah Vt. Va. Wash. W. Va. Wis. Wy.	Mont. Neb. Nev. N.H. N.J. N.M. N.Y. N.C. N.D. Ohio Ok. Ore. Penn. R.I. S.C. S.D. Tenn. Tex. Utah Vt. Va. Wash. W. Va. Wis. Wy.
Not in USA (Specify)	○ Not in USA (Specify)	○ Not in USA (Specify)	○ Not in USA (Specify)

(a) Type of Degree	(a) Type of Degree	(a) Type of Degree	(a) Type of Degree
○ Master's in nursing	○ Master's in another field	○ Doctorate in nursing	○ Doctorate in another field
	(b) Is this degree related to your nursing career? ○ Yes ○ No		(b) Is this degree related to your nursing career? ○ Yes ○ No
(c) Month/Year Received	(c) Month/Year Received	(c) Month/Year Received	(c) Month/Year Received
DATE Month Year	DATE Month Year	DATE Month Year	DATE Month Year
(d) State or Country	(d) State or Country	(d) State or Country	(d) State or Country
○ Ala. ○ Mont.	○ Ala. ○ Mont.	○ Ala. ○ Mont.	○ Ala. ○ Mont.
○ Ak. ○ Neb.	○ Ak. ○ Neb.	○ Ak. ○ Neb.	○ Ak. ○ Neb.
○ Ariz. ○ Nev.	○ Ariz. ○ Nev.	○ Ariz. ○ Nev.	○ Ariz. ○ Nev.
○ Ark. ○ N.H.	○ Ark. ○ N.H.	○ Ark. ○ N.H.	○ Ark. ○ N.H.
○ Calif. ○ N.J.	○ Calif. ○ N.J.	○ Calif. ○ N.J.	○ Calif. ○ N.J.
○ Colo. ○ N.M.	○ Colo. ○ N.M.	○ Colo. ○ N.M.	○ Colo. ○ N.M.
○ Conn. ○ N.Y.	○ Conn. ○ N.Y.	○ Conn. ○ N.Y.	○ Conn. ○ N.Y.
○ Del. ○ N.C.	○ Del. ○ N.C.	○ Del. ○ N.C.	○ Del. ○ N.C.
○ D.C. ○ N.D.	○ D.C. ○ N.D.	○ D.C. ○ N.D.	○ D.C. ○ N.D.
○ Fl. ○ Ohio	○ Fl. ○ Ohio	○ Fl. ○ Ohio	○ Fl. ○ Ohio
○ Ga. ○ Ok.	○ Ga. ○ Ok.	○ Ga. ○ Ok.	○ Ga. ○ Ok.
○ Hi. ○ Ore.	○ Hi. ○ Ore.	○ Hi. ○ Ore.	○ Hi. ○ Ore.
○ Id. ○ Penn.	○ Id. ○ Penn.	○ Id. ○ Penn.	○ Id. ○ Penn.
○ Ill. ○ R.I.	○ Ill. ○ R.I.	○ Ill. ○ R.I.	○ Ill. ○ R.I.
○ Ind. ○ S.C.	○ Ind. ○ S.C.	○ Ind. ○ S.C.	○ Ind. ○ S.C.
○ Iowa ○ S.D.	○ Iowa ○ S.D.	○ Iowa ○ S.D.	○ Iowa ○ S.D.
○ Kan. ○ Tenn.	○ Kan. ○ Tenn.	○ Kan. ○ Tenn.	○ Kan. ○ Tenn.
○ Ken. ○ Tex.	○ Ken. ○ Tex.	○ Ken. ○ Tex.	○ Ken. ○ Tex.
○ La. ○ Utah	○ La. ○ Utah	○ La. ○ Utah	○ La. ○ Utah
○ Maine ○ Vt.	○ Maine ○ Vt.	○ Maine ○ Vt.	○ Maine ○ Vt.
○ Mass. ○ Va.	○ Mass. ○ Va.	○ Mass. ○ Va.	○ Mass. ○ Va.
○ Md. ○ Wash.	○ Md. ○ Wash.	○ Md. ○ Wash.	○ Md. ○ Wash.
○ Mich. ○ W. Va.	○ Mich. ○ W. Va.	○ Mich. ○ W. Va.	○ Mich. ○ W. Va.
○ Minn. ○ Wis.	○ Minn. ○ Wis.	○ Minn. ○ Wis.	○ Minn. ○ Wis.
○ Miss. ○ Wy.	○ Miss. ○ Wy.	○ Miss. ○ Wy.	○ Miss. ○ Wy.
○ Mo.	○ Mo.	○ Mo.	○ Mo.
○ Not in USA (Specify) →	○ Not in USA (Specify) →	○ Not in USA (Specify) →	○ Not in USA (Specify) →

If your highest degree is a Master's or Doctorate, continue with Question 4; otherwise go to Question 5. (below)

4. What is the one primary focus of the highest degree you now hold? (Mark only one)

a. ○ Education
○ Supervision/Administration
○ Clinical Practice
○ Other (specify) → [ ]

b. → **If the primary focus was clinical practice, specify the type.** (Mark only one)

○ Community/Public Health
○ Maternal-child
○ Midwifery
○ Geriatrics/Gerontology
○ Medical/Surgical
○ Psychiatric-mental health
○ Other (specify) → [ ]

---

5. Are you currently enrolled in a formal education program leading to an academic degree with a nursing or nursing-related major?
○ Yes (answer questions 6, 7, and 8)
○ No (go to question 9)

6. Are you considered a full-time or part-time student?
○ Full-time student
○ Part-time student

7. Specify the type of degree for which you are now studying. (Mark only one)
○ Associate degree
○ Baccalaureate degree
○ Master's degree
○ Doctoral degree

8. How is your education being financed? (Mark all that apply)
○ Personal savings
○ Your own personal earnings from employment
○ Spouse's earnings from employment
○ Parental contributions
○ Federal traineeship, scholarship, or grant
○ Federally-assisted loan
○ State or local government loan or scholarship
○ Non-governmental scholarship, loan, or grant
○ University teaching or research fellowship
○ Employer tuition reimbursement plan
○ Other sources (specify) →

[ ]

A formal nurse practitioner training program is an organized program consisting of formal classes and clinical practice supervised by physicians and/or nurse practitioners which prepares registered nurses to provide primary health care including the ability to: obtain a health and medical history; perform a screening physical examination; order routine laboratory examinations; institute treatment under protocols for common self-limiting and/or chronically stabilized conditions; provide teaching and counseling in the area of health promotion and maintenance and to recognize when the patient should be referred to a physician or other health care provider.

9. Did you graduate from a formal nurse practitioner program?

- ○ Yes (answer questions 9a, 9b, 9c)
- ○ No (go on to question 10)

9a. How many months did you attend this program?

9b. When you completed this program, which of the following did you receive?
(Mark the appropriate response)

- ○ Certificate
- ○ Master's
- ○ Other (specify) →

9c. For what practitioner specialty did you study?
(Mark only one)

- ○ Pediatric
- ○ Midwifery
- ○ Maternity
- ○ Family
- ○ Adult
- ○ Psychiatric
- ○ Geriatric
- ○ School
- ○ Other (specify) →

A continuing education program is a formal learning program designed to update and increase knowledge and skills in health care. Exclude study for an academic degree.

10. Have you participated during the past year in any type of continuing education program?

- ○ Yes (answer questions 10a, 10b, 10c)
- ○ No (go on to question 11)

10a. In what type(s) of programs did you participate in the past year either inside or outside of your employment setting? (Mark all that apply)

- ○ Clinical Conference
- ○ Workshop/Institute
- ○ Multi-media (television, telephone, etc.)
- ○ Refresher Program
- ○ Programmed Instruction
- ○ Staff Development
- ○ Other (specify) →

10b. Mark the category which best describes the total number of hours of instruction offered in the programs you participated in during the past year. Include classroom, demonstration, and supervised practice.

- ○ Less than 20 hours
- ○ 20-40 hours
- ○ Over 40 hours

10c. How did you finance your continuing education?
(Mark all that apply)

- ○ Self
- ○ Employer
- ○ No cost to participant
- ○ Only took continuing education as part of my regular employment
- ○ Other (specify) →

If you answered questions 10a, 10b, and 10c, go to Section B, question 12a.

11. If you have not participated in any continuing education programs in the past year, what are your reasons for not participating? (Mark all that apply)

- ○ No programs available to me
- ○ No programs available which are applicable to my field of interest
- ○ Family responsibilities prevent it
- ○ Feel no need to
- ○ Cannot be released from job
- ○ Job does not require it
- ○ Courses not given at convenient times
- ○ Courses are too expensive
- ○ Other (specify) →

SECTION B
EMPLOYMENT STATUS

Being employed in nursing would include being: on a temporary leave of absence from your nursing position; on vacation; on sick leave; or a private duty nurse not on a case at the moment.

12a. What is the total number of years that you have worked for pay as a registered nurse since you graduated from your basic nursing educational program?

- ○ One or more years (go to 12b)
- ○ Less than a year (go to 13a)
- ○ Never worked as a nurse (go to Section C, Q. 26)

12b. If more than a year, indicate the number of years.

13a. Were you employed in nursing as of November 15, 1980?

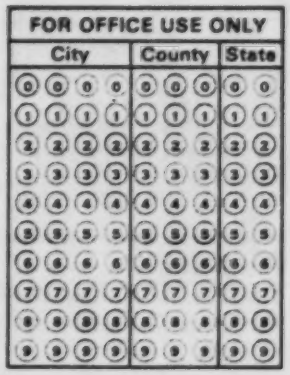
- ○ Yes (go to 13b)
- ○ No (go to 14)

13b. Indicate the city, county, and state of employment on November 15, 1980. If you were not employed in a fixed location (e.g., you are a private duty nurse), consider the area where you spent most of your working time as your location of employment.

City

County

State (or country, if not USA)



14a. Were you employed in nursing one year ago on November 15, 1979?

- ○ Yes (go to 14b)
- ○ No (go to 15)

14b. Was the location of your November 15, 1979 employment the same as for November 15, 1980?

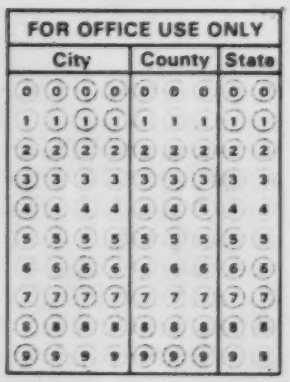
- ○ Yes (go to 15)
- ○ No (go to 14c)

14c. Indicate the city, county, and state of employment on November 15, 1979. If you were not employed in a fixed location (e.g., you are a private duty nurse), consider the area where you spent most of your working time as your location of employment.

City

County

State (or country, if not USA)



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Questions 15-25 refer to your principal employment setting and nursing position. If you currently hold more than one position in nursing, provide your answers in terms of what you consider your principal nursing position during your regular work year. For example, if you hold more than one nursing position (e.g., day/night or winter/summer), consider the principal nursing position as the one at which you spend the greater amount of time. If you are not currently employed in nursing, skip to Section C, question 26.

15. Using the following list, please mark the one entry from the list which best describes the type of setting in which you are currently working in your principal nursing position.

MARK ONLY ONE ANSWER

Hospital/Extended Care

- ○ Hospital, including all hospital clinics (excluding RN or LPN/LVN School of Nursing)
- ○ Nursing home or extended care facility

Nursing Education

- ○ LPN/LVN program
- ○ Diploma program (RN)
- ○ Associate degree program (RN)
- ○ Baccalaureate and/or higher degree nursing program
- ○ Other (specify) →

Public Health/Community Health Setting

- ○ Official state health department
- ○ Official city or county health department
- ○ Combination (official/voluntary) nursing service
- ○ Visiting nurse service
- ○ Community mental health center
- ○ Neighborhood health center
- ○ Planned parenthood center/ family planning center
- ○ Rural health center
- ○ Other (specify) →

Student Health Service

- ○ Board of education (public school system)
- ○ Private or parochial elementary or secondary school
- ○ College or university
- ○ Other (specify) →

Occupational Health (Employee Health Service)

- ○ Private industry
- ○ Government
- ○ Other (specify) →

Employee in Physician(s) or Dentist(s) Office

- ○ Solo practice
- ○ Partnership (one or more physicians and/or dentists)
- ○ Group practice
- ○ Health Maintenance Organization (HMO)
- ○ Other (specify) →

Self-Employed/Receive Fee for Service (i.e., not on a salary basis)

- ○ Private duty nursing
- ○ Solo practice
- ○ Partnership with other nurses
- ○ Joint practice between physician and nurse
- ○ Partnership with other health professionals
- ○ Other (specify) →

Other

- ○ Central or regional office of federal agency
- ○ State Board of Nursing
- ○ Nursing or Health Association
- ○ Health planning agency
- ○ Other (specify) →

16. Please indicate the type of agency by which you are currently employed in your principal nursing position.
(Mark only one)

① Government Agency
② Temporary Employment Service (e.g., UPJOHN, MEDICAL PERSONNEL POOL)
③ Non-profit Hospital
④ Proprietary Hospital
⑤ Other Non-government Agency (except 2-4 above)
⑥ Self-employed
⑦ Other (specify) →

17. Using the list below, please mark the one item which best corresponds to your current position title for your principal nursing position.
(Mark only one)

- ○ Administrator or assistant administrator
- ○ Charge nurse
- ○ Clinical nursing specialist
- ○ Consultant
- ○ Dean, director, or assistant/associate director of nursing education
- ○ Director or assistant/associate director of nursing service
- ○ General duty nurse
- ○ Head nurse or assistant head nurse
- ○ Inservice education director or instructor
- ○ Instructor
- ○ Nurse anesthetist
- ○ Nurse clinician
- ○ Nurse coordinator
- ○ Nurse midwife
- ○ Nurse practitioner
- ○ Patient care coordinator
- ○ Private duty nurse
- ○ Professor or assistant/associate professor
- ○ Public health nurse
- ○ Researcher or assistant researcher
- ○ School nurse
- ○ Staff nurse
- ○ Supervisor or assistant supervisor
- ○ Team leader
- ○ No position title (the only RN on staff)
- ○ Other (specify) →

18. For your current principal nursing position, please enter the approximate percentage of your time spent in the following areas during a usual work week. Please make sure the total equals 100%.

	Percent
A. Administration	
B. Consultation with agencies and/or professionals	
C. Direct patient care, not including staff supervision	
D. Research	
E. Supervision	
F. Teaching nursing or other students in health care occupations (include all class preparation time)	
G. Other (specify) →	
Total (be sure total equals 100%)	

If you spend any time during a usual work week in "direct patient care," as indicated in question 18, continue with question 19. Otherwise go to question 20.

19. Indicate for each of the following activities whether it is a part of your regular activities. If it is not an integral part of your direct patient care functions, indicate whether you carry it out sometimes, or seldom/never.
(Mark one response for each activity)

Activities	Performed Regularly	Performed Sometimes	Performed Seldom/ Never
A. Obtaining health histories	○	○	○
B. Performing complete physical examinations, using instruments (e.g., otoscope, stethoscope, vaginal speculum)	○	○	○
C. Performing some portions of physical examinations (e.g., taking vaginal smears, checking fetal heart beat)	○	○	○
D. Assisting the physician during patient examinations	○	○	○
E. Medical management for selected health conditions/problems	○	○	○
F. Primary responsibility for management of and delivery by normal mothers	○	○	○
G. Selecting plan of treatment as a result of interpreting laboratory test results	○	○	○
H. Developing therapeutic plans	○	○	○
I. Implementing therapy	○	○	○
J. Developing and modifying medication requirements	○	○	○
K. Administering medications	○	○	○
L. Sustaining and supporting persons who are impaired or ill during programs of diagnosis or therapy	○	○	○
M. Instructing patients in management of a defined illness	○	○	○
N. Instructing and counseling patients and families in the areas of health promotion and maintenance, including involving patients in planning for their own health care	○	○	○
O. Primary responsibility for providing follow-through on patient care	○	○	○

If you are employed by an institution or agency and are scheduled to work for the normal "full" work week throughout the normal work year, as defined by the agency, fill-in category "1." If you work less than the normal "full" work week and/or less than the normal work year, fill-in either "2" or "3," whichever is more appropriate.

If you are self-employed and are generally available for work throughout the year during what would constitute a normal "full" work week, mark category "1." If you restrict yourself to work only a segment of the work week and/or year, mark either "2" or "3" whichever is more accurate.

20. Do you:
    - ① Work an entire calendar year or school or academic year on a full-time basis?
    - ② Work an entire calendar year or school or academic year on a part-time basis?
    - ③ Work only part of the normal work year on either a full or part-time basis?

21. Approximately how many hours are you usually scheduled to work during a normal work week (as defined by the agency) at your principal nursing position? If you do not work on a routine schedule, how many hours do you usually work during a week at your principal nursing position? →

HOURS

22. Approximately how many weeks are there in your normal work year for your principal nursing position (include paid vacation, etc.)? →

WEEKS

FOR OFFICE USE ONLY

A	B	C	D	E

23. Please specify the annual earnings for your current principal position only. Provide gross salary before deductions for taxes, social security, etc. If you do not have a set annual salary, provide an estimate of your annual earnings. (For example, part-time, private duty, or self-employed)

Gross or Estimated Annual Earnings

Write the number in the boxes.

Then, mark the matching circle below each box.

(See example on page 2.)

24. Do you hold more than one position in nursing for pay?
    - ○ Yes (answer questions 24a and 24b)
    - ○ No (go on to question 25)

24a. Please indicate the type of work you do in your other nursing position(s) for pay. (Mark all that apply)
    - ○ Private duty nursing
    - ○ Work through Temporary Employment Service
    - ○ Hospital staff nurse
    - ○ Teaching
    - ○ Consultation/Research
    - ○ Other (specify) →

24b. Please provide an estimate of the total annual earnings for the year from your other nursing position(s).

F	G	FOR OFFICE USE ONLY

25. Do you carry any malpractice insurance exclusive of that your employer carries?
    - ○ Yes
    - ○ No

GO TO SECTION D, ITEM 31

SECTION C
EMPLOYMENT STATUS OF RNS NOT CURRENTLY EMPLOYED IN NURSING

26. How long has it been since you last worked as a registered nurse for pay?

- ○ Less than a year
- ○ One year or more (please specify)

YEARS

27a. Are you currently employed in an occupation other than nursing?

- ○ Yes (answer questions 27b & 27c)
- ○ No (go to question 28)

27b. Are you considered a full-time or part-time employee?

- ○ Full-time
- ○ Part-time

27c. Are you employed in a health-related agency or position?

- ○ Yes
- ○ No

28. Are you actively seeking employment as a registered nurse (e.g., making inquiries as to availability of employment, answering advertisements, having interviews)?

- ○ Yes (answer questions 29 & 30)
- ○ No (go on to question 31, section D)

29. Indicate the number of weeks during which you have been actively seeking a nursing position.

- ○ Less than a week
- ○ One week or more (please specify)

WEEKS

30. Are you looking for a full-time or part-time nursing position?

- ○ Full-time
- ○ Part-time

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SECTION D
GENERAL INFORMATION

We would like you to answer some additional questions for use in the statistical interpretation of your responses.

31. Sex:

- ○ Female
- ○ Male

32. What is your year of birth?

33. What is your racial/ethnic background?
(Mark only one)

- ○ Hispanic
- ○ American Indian or Alaskan Native
- ○ Asian or Pacific Islander
- ○ Black, not of Hispanic origin
- ○ White, not of Hispanic origin

34a. What is your current marital status?

- ○ Now married
- ○ Widowed, divorced, separated
- ○ Never married

34b. Children living at home most of the time are:
(include all children who live with you 6 months of the year or more)

- ○ No children at home
- ○ All less than 6 years old
- ○ All 6 years old or older
- ○ Some less than 6 and some over 6

35. In what city, county, and state were you living on November 15, 1980?

City

County

State (or Country, if not USA)

FOR OFFICE USE ONLY		
City	County	State
0 0 0 0	0 0 0	0 0
1 1 1 1	1 1 1	1 1
2 2 2 2	2 2 2	2 2
3 3 3 3	3 3 3	3 3
4 4 4 4	4 4 4	4 4
5 5 5 5	5 5 5	5 5
6 6 6 6	6 6 6	6 6
7 7 7 7	7 7 7	7 7
8 8 8 8	8 8 8	8 8
9 9 9 9	9 9 9	9 9

36a. Was the location of your residence on November 15, 1979 the same as on November 15, 1980?

- ○ Yes (go to 37)
- ○ No (go to 36b)

36b. Indicate the city, county, and state where you were living on November 15, 1979.

City

County

State (or Country, if not USA)

FOR OFFICE USE ONLY		
City	County	State
0 0 0 0	0 0 0	0 0
1 1 1 1	1 1 1	1 1
2 2 2 2	2 2 2	2 2
3 3 3 3	3 3 3	3 3
4 4 4 4	4 4 4	4 4
5 5 5 5	5 5 5	5 5
6 6 6 6	6 6 6	6 6
7 7 7 7	7 7 7	7 7
8 8 8 8	8 8 8	8 8
9 9 9 9	9 9 9	9 9

37. Indicate when you were first issued your first U.S. License (by one of the 50 states or the District of Columbia) to practice as a registered nurse and specify the state which issued this license to you.

37a. Year of first U.S. license: →
- ○ 1980
- ○ 1979
- ○ 1978
- ○ 1977
- ○ Prior to 1977

37b. State which issued license:

○ Ala.	○ Ken.	○ N.D.
○ Ak.	○ La.	○ Ohio
○ Ariz.	○ Maine	○ Ok.
○ Ark.	○ Mass.	○ Ore.
○ Calif.	○ Md.	○ Penn.
○ Colo.	○ Mich.	○ R.I.
○ Conn.	○ Minn.	○ S.C.
○ Del.	○ Miss.	○ S.D.
○ D.C.	○ Mo.	○ Tenn.
○ Fl.	○ Mont.	○ Tex.
○ Ga.	○ Neb.	○ Utah
○ Hi.	○ Nev.	○ Vt.
○ Id.	○ N.H.	○ Va.
○ Ill.	○ N.J.	○ Wash.
○ Ind.	○ N.M.	○ W. Va.
○ Iowa	○ N.Y.	○ Wis.
○ Kan.	○ N.C.	○ Wy.

We need to know how to get in touch with you should we have any questions regarding your answers. The next few items are for that purpose and will not be associated with your other answers once the data are compiled. Thank you.

38. What is your phone number?

Area Code	Number
	–

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Please note that the following item, #39, is very important in order to determine how many nurses in the country your answers may represent. As soon as this determination is calculated and the proper statistical code assigned, your name(s) and registration number(s) will no longer be associated with the other information.

39. In the space provided below, please list:

Column A — List all states in which you are now actively licensed.

Column B — List the permanent number on your certificate of registration or license for each state you listed.

Column C — List your complete name as it appears on each license, or mark if same as on label.

(A) State of Licensure	(B) Permanent number on certificate of registration or license	(C) Name as it appears on the registration or license, or mark the circle if same as on label.	OFFICE USE ONLY (D)	(E)
1. _____	_____	(same ○) _____ Last First MI	Ⓨ	
2. _____	_____	(same ○) _____ Last First MI	Ⓨ	
3. _____	_____	(same ○) _____ Last First MI	Ⓨ	
4. _____	_____	(same ○) _____ Last First MI	Ⓨ	
5. _____	_____	(same ○) _____ Last First MI	Ⓨ	
6. _____	_____	(same ○) _____ Last First MI	Ⓨ	
7. _____	_____	(same ○) _____ Last First MI	Ⓨ	
8. _____	_____	(same ○) _____ Last First MI	Ⓨ	
9. _____	_____	(same ○) _____ Last First MI	Ⓨ	
10. _____	_____	(same ○) _____ Last First MI	Ⓨ	

40a. Is your name, as it appears on the label of this questionnaire, correct?

○ Yes

○ No (please indicate correct name) →

Last, First, Middle Initial

40b. Is your address, as it appears on the label of this questionnaire, correct?

○ Yes

○ No (please indicate your correct address) →

41. **Name, address, and telephone number of a person who could forward mail to you or tell us how to communicate with you if you move:** →

Name _____
Last, First, Middle Initial

Address _____

_____

_____

Phone _____
Area Code Number

42. **Use this space for any special comments you wish to make about any of your responses to the questions or any additional remarks you may have.**

FOR OFFICE USE ONLY

THANK YOU VERY MUCH FOR YOUR HELP. PLEASE RETURN THE QUESTIONNAIRE IN THE ENCLOSED PRE-ADDRESSED ENVELOPE.

RESEARCH TRIANGLE INSTITUTE, P.O. BOX 12036, RESEARCH TRIANGLE PARK, N.C. 27709, ATTENTION: STEVE SLOAN.

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APPENDIX B

Statistical Methods

Appendix B: Statistical Methods

The sample design used for this study is a probability design. Such designs are characterized by the fact that every member of the target population has a known nonzero probability of being selected into the sample. Except for the presence of systematic nonsampling errors, such designs permit the computation of statistically unbiased estimates of characteristics of their target population. In order to compute these estimates, sampling weights are needed to reflect the complex sample design and to correct for the potential biasing effect of nonresponse. In this study, these weights were computed as inflation factors to represent the number of units in the target population that were accounted for by the sample unit to which the weight was assigned. The basis for the sampling weights was the unadjusted weight for each sample individual. This unadjusted weight, which was defined as the inverse of the sample individual's selection probability, was adjusted to account for nonresponse.

"Nesting" of the State Samples

An RN was represented on the licensure file of each state in which she/he was licensed at the time of sample selection. The procedure for identifying and accounting for such multiple licenses involved a scheme under which maximal overlap was achieved between the RNs who were in sample from state to state. Under this scheme an RN who was licensed under the same name in two states that were sampled at the same rate was selected or not selected for both states, due to the fact that the alpha segments and fractional alpha segments were identical for both of them. Further, for two states that were sampled at different rates, the alpha segments and portions of alpha segments for the lower sampling rate were completely included, or "nested," within those of the higher sampling rate.

Identification of and screening for multiple licenses for RN whose name of licensure differed from state to state (e.g., those whose marital status had changed) was facilitated by the adoption of the rule that just one license would determine sampling status for each RN. Specifically, the RN was selected for the sample or not based upon her/his name of licensure associated with the highest sampling rate. The implementation of this rule was facilitated by arranging the states in priority order based upon size (i.e., the total number of licenses for the state). Smaller states were assigned higher priority than larger states, with Alaska having highest and New York having lowest priority.

Weight Computation Procedures

A nurse's unique link to the sampling frame was the license in the state with the highest priority among all her/his states of licensure. After data collection and data entry activities had been concluded, the high priority state (i.e., state of assignment) was determined for each survey respondent, preparatory to the computation of weights.

Each nurse assigned to a particular state had an equal probability of being selected and, hence, equal weights. Weights were computed in order of priority, with the weight for the state having highest priority, Alaska, calculated first. Next the weight for the state having second highest priority, Wyoming, etc... This procedure facilitated the adjustment of weights to account for nurses with multiple licenses by making the weights for all higher priority states available at the point where the weight for a particular state was calculated. Specifically, the weight, W_i, for each respondent assigned to state i is given by,

$$W_i = Li / Ri \ ,$$

where

Li = the total number of RNs in the U.S. who are assignd to state i.

Ri = the number of sample respondents who are assigned to state i.

Li is a sample based estimate, obtained as follows. Let S_i denote the set of all nurses in the target population who have a license in state i and who also have a license in one or more states with a higher priority than state i. Assume that sample weights, W_j', are available for state j, for all $j < i$. Then an estimate of the number of nurses in S_i is

$$L2_i = \sum_{S_i} W_j' .$$

If $L1_i$ denotes the total number of RNs licensed in state i (including the "duplicates" who are members of the set S_i), then

$$L_i = L1_i - L2_i .$$

Formulas Used to Make Estimates

An estimate, $\hat{X}$ of the total of some characteristic of the target population is obtained from the sample data according to the following formula:

$$\hat{X} = \sum_{hi} W_{hi} x_{hi},$$

where W_{hi} is the weight for respondent i assigned to state h, x_{hi} is the value of the characteristic for that nurse, and $\sum_{hi}$ indicates the summation over all respondents in all states. Note that the weight, W_{hi}, is equal for all respondents associated with the same state, that is: $W_{h1} = W_{h2}$ = etc.

The estimate, $\hat{X}$, can be for any type of total. For example, to estimate the number of registered nurses living/working in Texas, X_{hi} becomes an indicator variable defined for all nurses in the sample as:

X_{hi} = 1, if nurse i in state h is living/working in Texas,
0, otherwise.

Another example is given by the estimate of the total number of hours worked by nurses who work in Texas. In this case, we have:

X_{hi} = the numberof hours nuse i in state h works if that nurse works in Texas,
0, otherwise.

Estimates of ratios and averages are obtained as the ratio of two estimated totals. For example to estimate the proportion of RNs living in Texas who also work in Texas, the estimator $\hat{Y}/\hat{X}$ is used, as $\hat{Y}$ is the estimated total number of nurses who both live and work in Texas and $\hat{X}$ is the estimated total number of nurses who live in Texas. An estimated average is given by $\bar{Y} = \hat{Y}/\hat{X}$ where $\hat{Y}$ is the estimated total value of the characteristic of interest and $\hat{X}$ is the estimated total number of RNs having the characteristic.

Analytic Techniques

Analysis of the data consists entirely of descriptive analyses. The formulas presented in the last section were used to obtain estimates of desired characteristics of the RN population of the United States. The resulting estimated numbers, pecents, and means are presented in this report in the form of frequency distributions, including cross-tabulations in the case of multi-variate distributions.

An assessment of the reliability of a sample estimate is given by its estimated sampling variance. Such variances facilitate the process of interpreting survey results by providing to it a sound statistical basis. Procedures that can be used to calculate the estimated sampling variances of statistics are given in Appendix C.

Calculation of Estimates of Variance

The Taylor series linerization method was used to obtain estimates of standard errors (the square root of the corresponding variances) of selected variables for this study. This well known method is a frequent choice of sampling statisticians because of its relative effectiveness as a measure of standard error, its applicability to most sampling designs, and its economic use of computer time. Sophisticated computer software which implements this method was used in this study [2].

Calculation of Design Effects

The design effect, D, for an estimate, $\hat{p}$, is given by the ratios of the estimated sampling variance, $\hat{\sigma}^2$, obtained by the Taylor series method to the sampling variance of $\hat{p}$ for a simple random sample of the same size. For the percentage $\hat{p}$ this is given by

$$D = n \hat{\sigma}^2 / \hat{p} (1-\hat{p})$$

where n is the unweighted number of respondents involved in the estimate $\hat{p}$.

Direct estimates of the design effect have been obtaind, by the Taylor series method, for a representative set of the important variables for each state. The average of the design effects obtained for each state is given in Table C-1. These average design effects are used in the formulas for estimating variances, as will be explained in Appendix C.

References Cited

1. American Nurses' Association, National Sample Survey of Registered Nurses (1977): A Report on the Nurse Population and Factors Affecting Their Supply. Kansas City, MO.

2. Shah, B.V. (1981) SESUDAAN, Research Triangle Institute, Research Triangle Park, North Carolina, Report No. RTI/5250/00-01S.

APPENDIX C

Reliability of Sample Estimates and Calculation of Generalized Variances

APPENDIX C: Reliability of Sample Estimates and Calculation of Generalized Variances

Relatively precise estimates of characteristics of the licensed registered nurse population of the United States can be made because of the underlying probability structure of the sample data. Such estimates are, in fact, an imperfect approximation of the truth. Numerous sources of error commonly plague sample surveys, causing resulting sample estimates to differ from the corresponding true population value. The sources of error are commonly classified into two catagories, sampling error and nonsampling errors. A probability sample, such as the one used in this study is said to be measurable if it is so designed that estimates of the magnitude of the sampling error can be computed from the sample data.

Nonsampling or Measurement Errors

Many of the sources or error--such as unuseable responses to vague or sensitive questions, no response from some members, and errors in coding, scoring, and processing the data--are beyond the control of the sampling statistician. Such errors, called nonsampling errors, are also common to the complete enumeration of a target population, such as the U.S. Census. Among the activities that caused the nonsampling errors to be reduced for the current survey were careful planning, follow-up of nonrespondents, and careful coding and processing of the sample data.

If nonsampling errors are random, in the sense that they are independent and tend to be compensating from one respondent to another, then they do not cause bias in estimates of totals, percents, or averages. Furthermore, an estimate of these errors will automatically be included as a component in the sampling errors that are estimated from the sample data.

Although random compensating nonsampling errors do not tend to bias estimates of simple statistics, the following statement is true

> "... these same fortunate results may or may not occur in cross-tabulations of two or more variables, some or all of which are subject to individual response errors. Often (but not necessarily) correlations or relationships in cross-tabulations are decreased by such errors, and sometimes substantially. Thus, errors that tend to be compensated in estimates of simple aggregates or averages may (but not necessarily will) introduce systematic errors or biases in measures of relationships or cross-tabulations. Any such effects on the relationships between two or more variables will not be reduced with increasing sample size."[1]

Nonsampling errors that are systematic rather than random and compensating are a source of bias for sample estimates. Such errors are not reduced by increasing the size of the sample, nor does the sample data provide an assessment of the magnitude of these errors. Systematic errors are reduced by such things as careful wording of questionnaire items, respondent motivation, and well-designed data-collection and data-management procedures. However, such errors sometimes occur in subtle ways and are less subject to design control than is the case for sampling errors.

Nonresponse to the survey can be one source of error, since it may be true that a characteristic being estimated is different, on the average, for respondents and nonrespondents. It is for this reason that considerable effort is expended to obtain a high response rate through such things as respondent motivation and follow-up procedures. A high response rate will reduce both random and systematic errors. Random errors can also be reduced by imputing feasible values for any nonrespondent.

Sampling Variability

In addition to nonsampling errors, sample survey results are subject to sampling errors, precisely because they are based upon a sample rather than upon the entire population. The magnitudes of the sampling error for an estimate, as indicated by measures of variability such as its variance or its standard error (the square root of its variance), provides a basis for judging the precision of the sample estimate.

Systematic sampling, which was the selection procedure for this study, may be very convenient from certain practical points of view, but it does not permit an unbiased estimate of the variability of sampling estimates, unless some assumptions are made. Estimates of standard errors are made based upon the assumption that our systematic sample of 40 alpha segments is equivalent to a simple random sample of 40 alpha segments.

Given an estimated standard error, the probability will be approximately .95 that the corresponding statistic will differ from the value of the population characteristic that it estimates by more than 1.96 standard deviations. Specifically, a 95 percent confidence interval for an estimated statistic, $\hat{s}$ takes the form

$$\hat{s} \pm 1.96\ \hat{\sigma}_{\hat{s}},$$

where $\hat{\sigma}_{\hat{s}}$ is the estimated standard error of $\hat{s}$.

The reader is cautioned against making inferences based upon estimates involving a very small number of respondents, where, for example, 25 is considered a small number. Such inferences are subject to relatively large sampling errors.

The Use of Standard Errors Already Computed by Direct Procedures

Direct estimates of standard errors have been obtained by the Taylor series method for some of the important variables or characteristics and are presented in Appendix D. Formulas for estimating the standard error for any survey statistics are given below. Note the standard errors calculated through the direct method take precedence over those obtained from the formula, whenever they are available for the variable of interest.

Estimating Variability of Statistics Whose Standard Errors Have Not Been Computed by the Direct Method

In the subsections that follow, two formulas are given for calculating the approximate standard errors of survey statistics. One formula is used for estimating the standard error of an estimated percent and the other formula is used to estimate the standard error of an estimated total. These formulas are presented as an alternative to the costly and cumbersome procedure that would be involved in the task of computing and publishing every standard error that might be of interest. Note that there will, in general, be some discrepancy between standard errors obtained through the direct method and those obtained from the formulas. While these differences are of little consequence for national estimates and those for large states, standard errors for small states should be interpreted cautiously.

Variability of Estimated Percentages for a State or for the United States

The standard error for an estimated percent is provided by the formula:

$$\sigma_{\hat{Y}/\hat{X}} = \sqrt{D \cdot \hat{Y}/\hat{X} \cdot (1-\hat{Y}/\hat{X})/n} \cdot (100)$$

where $\hat{Y}/\hat{X}$ is the ratio estimated and n is the number of survey respondents involved in the estimate. The multipliers, D, the design effect,

depends upon the state of location of the denominator $\hat{X}$ of the estimated percentage. The design effects for each state are given in Table 6-1.

Illustration of the Use of Tables of Standard Errors for Estimated Percentages

Information from this study shows that 74.2 percent of Wyoming's registered nurse supply was employed in nursing in 1980. The approximate standard error of the estimated percentage of Wyoming's nursing supply employed in nursing in 1980, where the denominator or unweighted base of the estimated ratio, .742, is 264, equals

$$100 \sqrt{1.2\ (.742)\ (1-.742)/(264)} = 3.0\% \ .$$

The chances are 68 out of 100 that the estimated percent difference from the corresponding population value by less than ±3.0 percent, and the chances are 95 out of 100 that this difference will not exceed ±6.0 percent (1.96 times that standard error).

Variability for Estimated Number for States or United States

The approximate standard error for an estimated number is obtained as follows. Let $\hat{X}$ be the estimated count of the number of nurses having a certain characteristic and let $\hat{Y}$ be an estimated of a subpopulation of $\hat{X}$. Then compute

$$V^2_{\hat{Y}} = V^2_{\hat{Y}/\hat{X}} + (C.V._{\hat{X}})^2$$

where

$$V^2_{\hat{Y}/\hat{X}} = D\ (1-\hat{Y}/\hat{X}) \ / \ n(\hat{Y}/\hat{X}) \ .$$

D is the design effect for the corresponding state and n is the number of respondent involved in the estimation of $\hat{X}$, $C.V._{\hat{X}}$ is the coefficient of variation of $\hat{X}$ and is defined by

$$C.V._{\hat{X}} = \frac{\text{Standard error of } \hat{X}}{X}$$

The coefficient of variation for each state is given in the last column of Table 6-2.

The formula for estimating the standard error of $\hat{Y}$ is

$$\sigma_{\hat{Y}} = \hat{Y} \sqrt{V^2_{\hat{Y}}} \quad .$$

Illustration of the Estimation of the Standard Error for Estimated Numbers of Nurses

According to the information obtained in this study 74.2% (or 2350) of Wyoming's 3166 nurses were employed in nursing in 1980. Therefore, we have $\hat{Y} = 2350$ and $\hat{X} = 3166$. The coefficient of variation for Wyoming is $C.V._{\hat{X}} = .0575$, from Table C-2, and the design effect is 1.2. Then,

$$V^2_{\hat{Y}/\hat{X}} = \frac{1.2\left(1 - \frac{2350}{3166}\right)}{264\left(\frac{2350}{3166}\right)} + (.0575)^2 = .0049,$$

and the desired standard error is

$$\sigma_{\hat{Y}} = 2350 \sqrt{.0049} = 164.$$

Variability of an Estimated Percentage for a Region or Other Grouping of States

The estimate of the standard error of an estimated percentage for a grouping of states is given by a linear combination of the constituent states. Specifically, the estimated percentage for regior R is given by

$$\hat{Y}_R/\hat{X}_R = \left(\sum_{s=1}^{h} \hat{Y}_s \Big/ \sum_{s=1}^{h} \hat{X}_s\right) \cdot 100$$

where $\hat{Y}_s$ and $\hat{X}_s$ are estimated totals for state s and h is the number of states in region R. The estimated standard error of this percentage is given by

$$\sigma_{\hat{Y}_R/\hat{X}_R} = 100 \sqrt{\sum_{s=1}^{h} (\hat{X}_s^2 \sigma^2_{\hat{Y}_s/\hat{X}_s}) / (\sum \hat{X}_s)^2},$$

where the standard error $\sigma_{\hat{Y}_s/\hat{X}_s}$ of the estimated percentage $\hat{Y}_s/\hat{X}_s$ are obtained by either the direct method or by the approximate method described previously.

Illustration of the Computation of the Standard Error of a Percentage for a Region or Another Grouping of States

The estimated percentage of the registered nurse supply of the Middle Atlantic region who were employed in nursing in 1980 is 74.22%, as given in Appendix D. The standard error of this estimate is approximated as follows: the estimated percentages of nurses who were employed in nursing in 1980 are 73.50%, 77.95%, and 69.25% for New Jersey, New York and Pennsylvania, respectively. The corresponding design effects are 1.0, 1.1, and 1.1. Consequently, the standard errors for the three states are:

$$\hat{\sigma}_{NJ} = 100 \sqrt{1.0\ (.7350)\ (1-.7350) / 794} = 1.6\%$$

$$\hat{\sigma}_{NY} = 100 \sqrt{1.1\ (.7795)\ (1-.7795) / 1337} = 1.2\%$$

$$\hat{\sigma}_{PA} = 100 \sqrt{1.1\ (.6925)\ (1-.6925) / 1142} = 1.4\%$$

and the estimated standard error of the percentage of Middle Atlantic region RNs who were employed in nursing in 1980 is:

$$\sigma_{\hat{Y}_R/\hat{X}_R} = 100 \sqrt{\frac{(63,630)^2\ (.016^2) + (156,755)^2\ (.012)^2 + (120,961)^2\ (.014)^2}{(63,630 + 156,755 + 120,961)^2}}$$

$$\doteq 0.80\%$$

Variability of an Estimated Number for a Region or Other Grouping of States

The formula

$$\hat{\sigma}_{Y_R} = \sqrt{\sum_{s=1}^{h} \sigma_{\hat{Y}_s}^2}$$

is used to estimate the standard error of an estimated number for a region R consisting of h states where $\sigma_{\hat{Y}_s}^2$, the corresponding estimated standard error for state s, has been estimated by either of the two methods discussed above.

Illustration of the Computation of the Standard Error of a Number for a Region or Another Grouping of States

The estimated number of the Middle Atlantic nurse population who were employed in nursing in 1980 has been computed to be 252,721. The corresponding standard errors were calculated by the direct method for the three states that constitute the Middle Atlantic region. These are given in Appendix D as 1266, 2209, and 2047 for New Jersey, New York and Pennsylvania, respectively. Therefore, the desired estimated standard error is

$$\hat{\sigma}_{Y_R} = \sqrt{(1,266)^2 + (2,209)^2 + (2,047)^2} = 3266.$$

Standard Error of a Difference Between Two Comparable Estimated Statistics (Numbers or Percentages) From Two Different States or Certain Other Groups

Let $\hat{X}_1$ and $\hat{Y}_1$ ($\hat{X}_2$ and $\hat{Y}_2$) denote estimated totals for state 1 (state 2). then the estimator for a difference between an estimated number for two states has the form

$$d_n = \hat{Y}_1 - \hat{Y}_2 ,$$

and its standard error is estimated by

$$\sigma_{d_n} = \sqrt{\sigma_{\hat{Y}_1}^2 + \sigma_{\hat{Y}_2}^2} .$$

Similarly, the estimator for the difference between an estimated percentage for two states has the form

$$d_p = \hat{Y}_1/\hat{X}_1 - \hat{Y}_2/\hat{X}_2 ,$$

with estimated standard error given by

$$\sigma_{d_n} = \sqrt{\sigma^2_{\hat{Y}_1/\hat{X}_1} + \sigma^2_{\hat{Y}_2/\hat{X}_2}} .$$

These formulas for standard errors provide accurate approximations for estimates involving the same variable in two different geographic areas and also for percentages for two groups in the same geographical area.

Illustration of the Computation of the Standard Error of a Difference for Two Comparable Characteristics From Two Different States or Certain Other Groups

The estimated percentage of nurses employed in nursing in 1980 for each of the nine geographical regions are given in Appendix D along with their estimated standard errors, which were obtained by the direct method. The values are 74.22% with a standard error of 0.79% for the Middle Atlantic region and 82.33% with a standard error of 0.66% for the West North Central region. Thus, the estimated difference between the percentages is 82.33 - 74.22 or 8.11% and its estimated standard error is

$$\sigma_{d_p} = \sqrt{(0.79)^2 + (0.66)^2} = 1.03\%$$

Therefore, the 95% confidence interval is

$$8.11 \pm 1.96\ (1.03)$$

or from 6.09% to 10.13%. Thus it is reasonable to conclude, with a 95 percent confidence level, that there is a real difference between the proportion in question for the Middle Atlantic versus the West North Central region.

Standard Error of a Difference Between Two Nonoverlapping Percentages of a Total Within the Same Area

The estimator for the standard error of the difference between two nonoverlapping percentages of a total within the same area is given by

$$\sigma_{d_p} = 100 \sqrt{D\left(\frac{p_1 q_1}{n} + \frac{p_2 q_2}{n} + \frac{2 p_1 q_2}{n} \right)}$$

where $p_i = \frac{x_i}{n}$; $q_i = 1 - p_i$ for $i = 1, 2, \ldots$; $x_1 + x_1 + \ldots + x_i = n$; and $d_p = p_1 - p_2$.

Illustration of the Computation of the Estimated Standard Error of a Difference for Two Nonoverlapping Percentages Within the Same Area

The following illustration is taken from reference [5]. It involves the computation of the standard error of the difference between the proportions of nurses employed in nursing full time versus part time (for Illinois in 1977). The two unweighted proportions are .470 and .274, respectively and the number of nurses involved in their computation is 526. Consequently, the desired standard error is

$$\sigma_{d_p} = 100 \sqrt{\frac{.470(.530)}{526} + \frac{.274(.753)}{526} + \frac{2(.470)(.247)}{526}} = 3.90\% .$$

Therefore the 95% confidence interval for dp is from 14.7 to 29.9 percent. Since this does not include zero, it is reasonable to conclude that there is a real difference between the two percentages.

Standard Error of a Difference Between Two Estimated Numbers From the Same State or Certain Other Groups

The estimator of the difference between two estimates, $\hat{Y}_1$ and $\hat{Y}_2$, from the same state or group takes the form

$$\hat{d}_n = \hat{Y}_1 - \hat{Y}_2$$

and the estimator for the difference between two percentages has the form

$$\hat{d}_p = \hat{Y}_1/\hat{X} - \hat{Y}_2/\hat{X} ,$$

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where $\hat{X}$ is the estimate for the particular group. The computation of the estimated standard error of $\hat{d}_n$ involves first computing the rel-variance of d_n,

$$V^2_{\hat{d}_n} = V^2_{d_p} + (C.V._{\hat{X}})^2$$

Table 6-2 contains $C.V._{\hat{X}}$, the coefficient of variation of $\hat{X}$, for each state.

Then the desired standard error is given by

$$\hat{\sigma}_{d_n} \doteq \hat{d}_n \cdot \sqrt{V^2_{\hat{d}_n}} .$$

Illustration of the Computation of the Estimated Standard Error of a Difference Between Two Estimated Numbers From the Same State or Group

This illustration is also taken from reference [5]. This reference gives, for Alabama, the estimated number of nurses employed in nursing full-time as $\hat{Y}_1 = 7{,}729$, the number so employed part time as $\hat{Y}_2 = 2{,}049$, and the total number of nurses as $\hat{X} = 13{,}151$. Therefore, the rel-variance of $\hat{d}_n = \hat{Y}_1 - \hat{Y}_2$ is

$$V^2_{\hat{d}_n} = \frac{1.1\,\frac{(.588)(.412)}{254} + \frac{(.156)(.844)}{254} + \frac{2(.588)(.156)}{254}}{\left(\frac{7729}{13151} - \frac{2049}{13151}\right)^2} + (.0324)^2$$

$$= .0140$$

and the desired estimated standard error of $\hat{d}_n$ is given by

$$\hat{\sigma}_{\hat{d}_n} = (7{,}729 - 2{,}049) \cdot \sqrt{.0140} = 672 .$$

Table C-1. Average Design Effects[1] (F) and Factors ($\sqrt{F}$) for Percentages Estimated From the National Survey of Registered Nurses, by State[2], 1980

State	Average Design Effect (F)	Factor ($\sqrt{F}$)
United States	1.4	1.17
Alabama	1.0	1.00
Alaska	1.4	1.19
Arizona	1.1	1.05
Arkansas	1.0	1.01
California	1.1	1.07
Colorado	1.1	1.04
Connecticut	1.1	1.04
Delaware	1.3	1.16
D.C.	1.1	1.04
Florida	1.1	1.05
Georgia	1.0	1.02
Hawaii	1.2	1.08
Idaho	1.0	1.00
Illinois	1.0	1.02
Indiana	1.0	1.00
Iowa	1.0	1.00
Kansas	1.0	1.00
Kentucky	1.0	1.00
Louisiana	1.0	1.02
Maine	1.1	1.06
Maryland	1.0	1.01
Massachusetts	1.1	1.03
Michigan	1.0	1.01
Minnesota	1.0	1.01
Mississippi	1.1	1.04
Missouri	1.0	1.01
Montana	1.1	1.04
Nebraska	1.2	1.11
Nevada	1.0	1.00
New Hampshire	1.1	1.04
New Jersey	1.0	1.01
New Mexico	1.0	1.02
New York	1.1	1.02
North Carolina	1.0	1.02
North Dakota	1.0	1.01
Ohio	1.0	1.01
Oklahoma	1.0	1.00
Oregon	1.0	1.00
Pennsylvania	1.1	1.03
Rhode Island	1.0	1.02

Table C-1. Average Design Effects[1] (F) and Factors ($\sqrt{F}$) for Percentages Estimated from the National Survey of Registered Nurses, by State[2], 1980 (continued)

State	Average Design Effect (F)	Factor ($\sqrt{F}$)
South Carolina	1.2	1.09
South Dakota	1.1	1.03
Tennessee	1.0	1.00
Texas	1.1	1.07
Utah	1.0	1.01
Vermont	1.2	1.12
Virginia	1.0	1.02
Washington	1.1	1.03
West Virginia	1.0	1.01
Wisconsin	1.0	1.02
Wyoming	1.2	1.08

[1] These design effects are the approximate of the ratio of the sampling variance of a percentage estimated from the survey to the corresponding sampling variance of a simple random sample with the same number of respondents.

[2] State of employment, if employed in nursing. State of residence, if not employed in residence.

Table C-2. Direct Estimates of Standard Error and Coefficient of Variation of the Estimated Registered Nurse Population, by State

State	Survey Respondents (n)	State Nurse Population (X)	Direct Estimate of Standard Error	$C.V._X$
United States	30,375	1,662,383	786	.00047
Alabama	501	19,785	450	.02274
Alaska	233	3,018	206	.06826
Arizona	522	22,732	551	.02424
Arkansas	356	11,220	364	.03244
California	1,472	155,739	1,533	.00984
Colorado	639	24,301	585	.02407
Connecticut	633	33,451	730	.02182
Delaware	245	5,542	320	.05774
District of Columbia	220	9,115	517	.05672
Florida	929	69,390	1,304	.01879
Georgia	557	30,420	693	.02278
Hawaii	328	6,384	264	.04135
Idaho	345	5,789	220	.03800
Illinois	1,034	86,196	1,132	.01313
Indiana	651	32,464	658	.02027
Iowa	650	24,358	408	.01675
Kansas	503	18,010	402	.02232
Kentucky	481	19,994	486	.02431
Louisiana	565	18,939	425	.02244
Maine	410	10,159	365	.03593
Maryland	670	33,039	839	.02539
Massachusetts	940	76,926	1,221	.01587
Michigan	832	66,162	960	.01451
Minnesota	831	38,327	480	.01252
Mississippi	381	11,166	361	.03233
Missouri	643	30,835	583	.01891
Montana	423	6,544	200	.03056
Nebraska	546	12,928	321	.02483
Nevada	276	4,801	146	.03041
New Hampshire	378	10,179	409	.04018
New Jersey	794	66,630	1,154	.01814
New Mexico	293	6,805	308	.04526
New York	1,337	156,755	1,709	.01090
North Carolina	761	34,698	675	.01945
North Dakota	349	5,169	169	.03269
Ohio	1,051	79,187	965	.01219
Oklahoma	511	13,404	274	.02044
Oregon	655	20,922	385	.01840
Pennsylvania	1,142	120,961	1,685	.01393

Table C-2. Direct Estimates of Standard Error and Coefficient of Variation of the Estimated Registered Nurse Population, by State (continued)

State	Survey Respondents (n)	State Nurse Population (X)	Direct Estimate of Standard Error	$C.V._X$
Rhode Island	356	9,295	310	.03335
South Carolina	561	16,410	482	.02937
South Dakota	330	5,748	205	.03566
Tennessee	540	25,662	604	.02354
Texas	897	72,688	1,116	.01535
Utah	337	7,974	241	.03022
Vermont	309	5,447	284	.05214
Virginia	818	34,966	785	.02245
Washington	733	35,071	596	.01699
West Virginia	390	11,844	401	.03386
Wisconsin	750	34,669	518	.01494
Wyoming	264	3,166	182	.05749

APPENDIX D

Tables of Sampling Errors of Selected Statistics Calculated Through Direct Methods

Table D-1. Standard errors (S.E.) of selected statistics (numbers and percentages) for selected characteristics of the U.S.[1] registered nurses population

Characteristic	Total of all licensed nurses			
	Estimated number	S.E. of estimated number	Estimated percent	S.E. of estimated percent
Basic nursing educational preparation				
Diploma	1,050,662	5,248	63.20	0.32
Associate degree	308,616	4,267	18.56	0.26
Baccalaurate	287,993	4,131	17.32	0.25
Masters	1,593	359	0.10	0.02
Not reported	13,520	1,010	0.81	0.06
1979 employment status				
Employed in nursing	1,210,608	4,999	72.82	0.30
Not employed in nursing	376,042	4,711	22.62	0.28
Not reported	75,734	(2)	4.23	0.13
1980 employment status				
Employed in nursing	1,272,852	4,777	76.57	0.29
Not employed in nursing	388,537	4,773	23.37	0.29
Not reported	994	255	0.06	0.02
Racial/ethnic background				
Hispanic	20,816	1,261	1.25	0.08
American Indian/Alaskan native	4,249	566	0.26	0.03
Asian/Pacific islander	33,601	1,688	2.02	0.10
Black	60,845	2,204	3.66	0.13
Caucasian/White	1,521,754	3,210	91.54	0.19
Total minority	119,511	3,004	7.19	0.18
Total nonminority	1,521,754	3,210	91.54	0.19
Not reported	21,118	1,240	1.27	0.07
Sex				
Female	1,603,069	2,086	96.43	0.13
Male	45,060	1,846	2.71	0.11
Not reported	14,254	1,002	0.86	0.06
Marital status				
Married	1,173,930	5,127	70.62	0.31
Widowed/divorced/ separated	229,246	3,874	13.79	0.23
Never married	246,409	4,027	14.82	0.24
Not reported	12,798	956	0.77	0.06

[1]Includes only registered nurses living or working the the United States.

[2]Estimates not available.

Table D-2. Standard Errors (S.E.) of Estimated Number and Percent of the U.S.[1] Registered Nurse Population, by Age Group

Characteristic	Total of all licensed nurses			
	Estimated number	S.E. of estimated number	Estimated percent	S.E. of estimated percent
Age Group				
Less than 25 years	128,554	2,951	7.73	0.18
25-29 years	289,777	4,165	17.43	0.25
30-34 years	255,400	4,032	15.36	0.24
35-39 years	205,979	3,688	12.39	0.22
40-44 years	180,327	3,511	10.85	0.21
45-49 years	150,087	3,211	9.03	0.19
50-54 years	137,154	3,096	8.25	0.19
55-59 years	124,613	2,981	7.50	0.18
60-64 years	81,485	2,452	4.90	0.15
65 years and older	74,270	2,406	4.47	0.15
Not reported	34,737	1,633	2.09	0.10

[1]Includes only registered nurses living or working in the United States.

Table D-3. Standard Errors (S.E.) of Estimated Number and Percent of the U.S.[1] Registered Nurse Population for Racial/Ethnic Background by Selected Characteristic

	Racial/ethnic background							
	Minority				Nonminority			
	Estimated number	S.E. of estimated number	Estimated percent	S.E. of estimated percent	Estimated number	S.E. of estimated number	Estimated percent	S.E. of estimated percent
Basic nursing education								
Diploma	55,276	2,117	46.25	1.33	980,293	5,344	64.42	0.33
Associate degree	34,284	1,690	28.69	1.21	270,766	4,032	17.79	0.26
Baccalaurate	28,946	1,520	24.22	1.13	257,748	3,929	16.94	0.26
Masters	57	57	0.05	0.05	1,536	354	0.10	0.02
Not reported	948	266	0.79	0.22	11,411	922	0.75	0.06
Employment status								
Employed in nursing full-time	89,618	2,651	74.99	1.14	755,848	5,540	49.67	0.35
Employed in nursing part-time	14,351	1,081	12.01	0.85	384,815	4,668	25.29	0.30
Employed in nursing, full- or part-time not reported	2,069	454	1.73	0.38	10,558	881	0.69	0.06
Other employed nurse	3,826	522	3.20	0.43	70,954	2,293	4.66	0.15
Not employed	8,898	842	7.45	0.68	288,804	4,294	18.98	0.28
Not employed in nursing employment status not reported	710	242	0.59	0.20	10,506	861	0.69	0.06
No response	38	38	0.03	0.03	269	105	0.02	0.01
Employed in nursing-1980								
Yes	106,039	2,860	88.73	0.81	1,151,221	5,222	75.65	0.30
No	13,435	1,017	11.24	0.81	370,263	4,693	24.33	0.30
Not reported	38	38	0.03	0.03	269	105	0.02	0.01
Employed in nursing-1979								
Yes	100,252	2,792	83.89	0.95	1,095,850	5,346	72.01	0.32
No	12,096	968	10.12	0.77	359,183	4,635	23.60	0.30
Not reported	7,163	([2])	5.99	([2])	66,721	([2])	4.39	([2])

[1]Includes only registered nurses living or working in the United States.

[2]Estimates not available.

Table D-4 Standard Errors (S.E.) of Selected Statistics for Selected Characteristics of the U.S.[1] Registered Nurse Population, by Region

Characteristic	Total United States				Region			
					New England		Middle Atlantic	
	Estimated Number	S. E. of Estimated Number	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Basic nursing educational preparation								
Diploma	1,050,662	5,248	63.20	0.32	73.26	0.94	71.13	0.80
Associate degree	308,616	4,267	18.56	0.26	10.81	0.65	14.49	0.63
Baccalaurate and above	289,586	4,490	17.42	0.26	15.41	0.76	13.78	0.62
Not reported	13,520	1,010	0.81	0.06	0.51	0.15	0.59	0.13
Highest nursing related educational preparation								
Diploma in nursing	903,132	5,451	54.33	0.33	63.91	1.02	60.14	0.87
Associate degree in nursing	295,318	4,203	17.76	0.25	10.62	0.65	13.77	0.62
Baccalaurate degree	367,816	4,616	22.13	0.28	19.18	0.84	20.64	0.73
Master's degree in nursing	55,055	1,988	3.31	0.12	4.34	0.44	2.93	0.30
Masters degree in related field	26,697	1,469	1.61	0.09	1.20	0.23	1.77	0.24
Doctorate		(2)	(2)	(2)	(2)	(2)	(2)	(2)
Not reported		(2)	(2)	(2)	(2)	(2)	(2)	(2)
Current enrollment in formal education								
Enrolled	167,230	3,410	10.06	0.21	10.59	0.66	11.90	0.59
Not enrolled	1,441,415	3,845	86.71	0.23	85.86	0.74	84.73	0.65
Not reported	53,737		3.23	0.12	3.55	0.39	3.37	0.33
Current student status								
Enrolled full-time	32,136	1,532	1.93	0.09	2.08	0.31	1.91	0.24
Enrolled part-time	134,708	3,110	8.10	0.19	8.41	0.59	9.96	0.54
Enrollment not reported	386	173	0.02	0.01	0.10	0.07	0.04	0.04

Table D-4 (Continued)

Characteristic	Region							
	East North Central		West North Central		South Atlantic		East South Central	
	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Basic nursing educational preparation								
Diploma	66.11	0.74	66.02	0.81	61.14	0.73	51.17	1.16
Associate degree	16.42	0.58	16.88	0.64	21.43	0.62	29.93	1.06
Baccalaurate and above	16.82	0.58	16.59	0.64	16.72	0.55	17.93	0.89
Not reported	0.65	0.12	0.49	0.14	0.71	0.14	0.97	0.22
Highest nursing related educational preparation								
Diploma in nursing	58.27	0.77	59.17	0.84	53.38	0.75	44.80	1.16
Associate degree in nursing	15.42	0.57	16.05	0.63	20.64	0.61	28.62	1.04
Baccalaurate degree	21.43	0.64	20.28	0.69	20.30	0.60	20.51	0.96
Master's degree in nursing	2.99	0.27	2.39	0.26	3.14	0.25	4.00	0.47
Masters degree in related field	1.25	0.18	1.34	0.19	1.71	0.21	1.30	0.28
Doctorate	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Not reported	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Current enrollment in formal education								
Enrolled	10.05	0.48	8.30	0.47	9.97	0.44	11.20	0.74
Not enrolled	86.73	0.54	89.39	0.52	87.08	0.50	85.31	0.84
Not reported	3.21	0.28	2.31	0.25	2.95	0.27	3.49	0.44
Current student status								
Enrolled full-time	1.55	0.19	1.29	0.19	1.91	0.20	2.73	0.38
Enrolled part-time	8.50	0.44	7.01	0.43	8.04	0.41	8.47	0.66
Enrollment not reported	0	0	0	0	0.02	0.01	0	0

Table D-4 (Continued)

Characteristic	Region					
	West South Central		Mountain		Pacific	
	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Basic nursing educational preparation						
Diploma	53.70	1.22	55.60	1.00	52.74	1.06
Associate degree	20.40	0.96	21.84	0.80	24.74	0.94
Baccalaurate and above	24.25	1.05	21.65	0.84	21.29	0.84
Not reported	1.65	0.34	0.91	0.18	1.23	0.23
Highest nursing related educational preparation						
Diploma in nursing	45.78	1.22	46.07	1.01	42.51	1.05
Associate degree in nursing	20.43	0.96	20.44	0.78	23.66	0.93
Baccalaurate degree	27.90	1.10	27.22	0.91	26.28	0.93
Master's degree in nursing	3.13	0.45	3.81	0.40	4.04	0.41
Masters degree in related field	1.36	0.31	1.68	0.25	2.33	0.34
Doctorate	(2)	(2)	(2)	(2)	(2)	(2)
Not reported	(2)	(2)	(2)	(2)	(2)	(2)
Current enrollment in formal education						
Enrolled	9.90	0.73	8.47	0.58	8.47	0.62
Not enrolled	87.00	0.82	88.04	0.68	88.10	0.71
Not reported	3.10	0.43	3.50	0.39	3.43	0.39
Current student status						
Enrolled full-time	1.61	0.29	2.68	0.36	2.45	0.33
Enrolled part-time	8.27	0.67	5.78	0.48	6.00	0.54
Enrollment not reported	0.02	0.02	0.01	0.01	0.01	0.01

[1]Includes only registered nurses living or working in the United States.

[2]Estimates not available.

Table D-5 Standard Errors (S.E.) of Selected Statistics for Selected Characteristics of the U.S. Registered Nurse Population, by Region

Characteristic	Total United States				Region			
					New England		Middle Atlantic	
	Estimated Number	S. E. of Estimated Number	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Nurse holds more than one nursing position								
Yes	143,693	3,166	8.64	0.19	8.97	0.61	8.14	0.49
No	1,122,636	5,268	67.53	0.32	65.77	1.02	65.77	0.86
Not reported	6,523	658	0.39	0.04	0.36	0.13	0.31	0.09
Not employed in nursing	389,531	4,777	23.43	0.29	24.89	0.94	25.78	0.79
Actively seeking nursing position								
Yes	32,784	1,563	1.97	0.09	2.12	0.30	2.32	0.27
No	342,958	4,578	20.63	0.28	21.99	0.90	22.64	0.75
Not reported	12,795	957	0.77	0.06	0.77	0.20	0.81	0.16
Employed in nursing	1,273,846	4,773	76.63	0.29	75.13	0.94	74.22	0.79
Sex								
Female	1,603,069	2,086	96.43	0.13	97.36	0.35	97.12	0.31
Male	45,060	1,846	2.71	0.11	1.83	0.30	2.55	0.29
Not reported	14,254	1,002	0.86	0.06	0.82	0.19	0.33	0.10
Marital status								
Now married	1,173,930	5,127	70.62	0.31	71.42	0.97	69.59	0.84
Formally married	229,246	3,874	13.79	0.23	11.46	0.68	12.74	0.60
Never married	246,409	4,027	14.82	0.24	16.28	0.80	17.33	0.69
Not reported	12,798	956	0.77	0.06	0.84	0.20	0.34	0.11
Ethnic background								
Minority	119,511	3,004	7.19	0.18	2.07	0.29	8.20	0.49
Nonminority	1,521,754	3,210	91.54	0.19	96.80	0.36	90.77	0.52
Not reported	21,118	1,240	1.27	0.07	1.13	0.22	1.03	0.18
Nurse graduate								
Foreign nurse graduate	50,545	2,125	3.06	0.13	1.49	0.26	3.71	0.34
U.S. graduate	1,577,650	2,647	95.41	0.15	97.25	0.34	94.39	0.42
Location of graduate not reported	25,358	1,425	1.53	0.09	1.26	0.23	1.90	0.26

Table D-5 (Continued)

Characteristic	East North Central		West North Central		South Atlantic		East South Central	
	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Nurse holds more than one nursing position								
Yes	7.30	0.41	9.13	0.49	8.53	0.41	6.71	0.57
No	69.95	0.73	72.90	0.77	67.29	0.72	74.30	1.02
Not reported	0.39	0.10	0.29	0.09	0.33	0.08	0.59	0.17
Not employed in nursing	22.36	0.66	17.67	0.66	23.86	0.67	18.40	0.91
Actively seeking nursing position								
Yes	1.90	0.22	1.64	0.21	2.02	0.22	1.86	0.32
No	19.84	0.64	15.36	0.63	21.22	0.64	15.46	0.85
Not reported	0.62	0.16	0.68	0.13	0.58	0.12	0.86	0.21
Employed in nursing	77.64	0.66	82.33	0.66	76.18	0.67	81.82	0.90
Sex								
Female	97.04	0.27	96.81	0.32	96.80	0.27	95.72	0.50
Male	2.02	0.23	2.43	0.28	2.42	0.24	3.15	0.44
Not reported	0.77	0.14	0.76	0.14	0.78	0.13	1.14	0.25
Marital status								
Now married	72.58	0.71	74.84	0.74	69.98	0.70	71.23	1.07
Formally married	12.29	0.52	10.91	0.53	15.50	0.56	13.99	0.83
Never married	14.39	0.55	13.64	0.59	13.88	0.52	13.92	0.81
Not reported	0.74	0.13	0.61	0.13	0.64	0.12	0.85	0.21
Ethnic background								
Minority	6.12	0.39	3.61	0.33	7.97	0.41	6.33	0.57
Nonminority	92.72	0.42	94.92	0.39	91.02	0.43	92.04	0.63
Not reported	1.17	0.17	1.48	0.21	1.01	0.14	1.63	0.29
Nurse graduate								
Foreign nurse graduate	3.01	0.28	0.88	0.19	2.72	0.28	0.44	0.15
U.S. graduate	95.70	0.33	98.17	0.25	95.94	0.33	98.32	0.30
Location of graduate not reported	1.30	0.18	0.95	0.17	1.33	0.18	1.24	0.26

Table D-5 (Continued)

Characteristic	Region					
	West South Central		Mountain		Pacific	
	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Nurse holds more than one nursing position						
Yes	8.64	0.69	9.32	0.58	11.39	0.70
No	66.10	1.17	64.64	0.99	65.56	1.01
Not reported	0.56	0.76	0.76	0.23	0.39	0.10
Not employed in nursing	24.70	1.07	25.28	0.91	22.67	0.87
Actively seeking nursing position						
Yes	1.66	0.31	2.05	0.32	1.73	0.26
No	22.14	1.03	22.23	0.87	20.36	0.84
Not reported	0.90	0.22	0.99	0.20	0.56	0.13
Employed in nursing	75.31	1.07	74.74	0.91	77.35	0.87
Sex						
Female	94.16	0.59	95.87	0.43	95.57	0.43
Male	4.43	0.51	3.09	0.36	3.58	0.39
Not reported	1.41	0.31	1.05	0.25	0.86	0.19
Marital status						
Now married	68.95	1.14	70.02	0.94	68.68	0.99
Formally married	17.39	0.94	15.58	0.72	16.24	0.79
Never married	12.85	0.81	13.41	0.72	14.26	0.74
Not reported	0.81	0.23	0.98	0.24	0.83	0.19
Ethnic background						
Minority	10.29	0.79	4.57	0.41	11.52	0.69
Nonminority	88.80	0.82	94.21	0.48	87.05	0.72
Not reported	0.91	0.23	1.23	0.25	1.43	0.26
Nurse graduate						
Foreign nurse graduate	2.96	0.45	1.68	0.25	6.37	0.56
U.S. graduate	94.65	0.59	96.72	0.35	92.02	0.61
Location of graduate not reported	2.39	0.40	1.59	0.25	1.62	0.27

[1]Includes only registered nurses living or working in the United States.

Table D-6 Standard Errors (S.E.) of Selected Statistics for the U.S.[1] Registered Nurse Population, by Region

Characteristic	Total United States				Region			
					New England		Middle Atlantic	
	Estimated Number	S. E. of Estimated Number	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Field of employment								
Hospital	835,647	5,582	50.27	0.34	45.43	1.06	47.23	0.91
Nursing home/extended care facility	101,209	2,636	6.09	0.16	8.20	0.56	7.12	0.47
Nursing education	46,504	1,762	2.80	0.11	2.13	0.29	2.28	0.27
Public/Community health	83,440	2,390	5.02	0.14	5.64	0.48	4.41	0.38
School nurse	44,907	1,884	2.70	0.11	3.42	0.37	3.97	0.35
Occupational health	29,164	1,459	1.75	0.09	1.69	0.27	2.01	0.26
Physician/Dentist Assistant	71,974	2,191	4.33	0.13	3.64	0.39	3.01	0.30
Private duty	20,240	1,290	1.22	0.08	2.15	0.31	2.27	0.27
Other, self-employed	10,853	883	0.65	0.05	1.29	0.25	0.41	0.11
Other	21,666	1,293	1.30	0.08	1.15	0.23	1.11	0.19
Not employed in nursing	389,531	4,777	23.43	0.29	24.89	0.94	25.78	0.79
Not reported	7,249	743	0.44	0.04	0.37	0.13	0.39	0.11
Type of position								
Administrator/Assistant	61,416	2,034	3.69	0.12	3.45	0.36	2.97	0.31
Consultant	7,931	720	0.48	0.04	0.54	0.15	0.19	0.07
Supervisor	76,174	2,321	4.58	0.14	4.76	0.46	4.66	0.39
Instructor	60,323	2,028	3.63	0.12	2.99	0.34	3.19	0.32
Head nurse/assistant	90,203	2,552	5.43	0.15	4.44	0.43	5.78	0.43
Staff/general duty	824,844	5,590	49.62	0.34	49.01	1.07	48.53	0.91
Nurse practitioner	16,758	1,088	1.01	0.07	1.06	0.23	0.77	0.16
Clinial specialist	19,070	1,201	1.15	0.07	1.54	0.28	0.59	0.13
Nurse Clinician	8,006	716	0.48	0.04	0.67	0.18	0.20	0.08
Nurse Anesthetist	14,580	992	0.88	0.06	0.49	0.14	0.74	0.15
Researcher	2,544	452	0.15	0.03	0.05	0.04	0.23	0.09
Private duty nurse	22,983	1,370	1.38	0.08	2.43	0.33	2.44	0.28
Other	61,473	2,135	3.70	0.13	3.19	0.37	3.55	0.34
Not reported	6,547	683	0.39	0.04	0.50	0.15	0.37	0.10
Not employed in nursing	389,531	4,777	23.43	0.29	24.89	0.94	25.78	0.79

Table D-6 (Continued)

Characteristic	Region							
	East North Central		West North Central		South Atlantic		East South Central	
	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Field of employment								
Hospital	51.97	0.79	55.20	0.85	49.00	0.76	56.35	1.15
Nursing home/extended care facility	6.95	0.38	8.04	0.46	4.80	0.32	4.42	0.46
Nursing education	2.83	0.26	3.60	0.32	2.86	0.23	4.28	0.46
Public/Community health	4.17	0.31	4.80	0.36	6.98	0.38	5.79	0.53
School nurse	1.92	0.22	2.19	0.25	1.51	0.18	1.69	0.29
Occupational health	1.89	0.21	1.40	0.20	2.05	0.20	2.19	0.35
Physician/Dentist Assistant	5.04	0.35	4.81	0.35	4.97	0.32	3.94	0.45
Private duty	0.72	0.13	0.46	0.11	1.47	0.18	0.59	0.17
Other, self-employed	0.59	0.12	0.49	0.12	0.62	0.12	0.68	0.19
Other	1.23	0.18	1.09	0.18	1.48	0.18	1.35	0.26
Not employed in nursing	22.36	0.66	17.67	0.66	23.86	0.67	18.40	0.91
Not reported	0.35	0.10	0.26	0.08	0.41	0.09	0.32	0.12
Type of position								
Administrator/Assistant	3.99	0.30	4.65	0.36	3.35	0.26	5.15	0.52
Consultant	0.48	0.11	0.63	0.13	0.58	0.11	0.73	0.20
Supervisor	3.93	0.30	5.00	0.37	4.62	0.31	5.80	0.55
Instructor	3.84	0.30	4.20	0.34	3.78	0.28	5.49	0.52
Head nurse/assistant	5.22	0.35	5.38	0.39	5.78	0.34	6.35	0.58
Staff/general duty	52.03	0.79	54.78	0.85	47.99	0.75	49.23	1.16
Nurse practitioner	0.87	0.15	0.81	0.15	1.04	0.14	1.07	0.24
Clinial specialist	0.57	0.12	0.74	0.14	1.23	0.16	1.15	0.25
Nurse Clinician	0.44	0.10	0.53	0.12	0.67	0.11	0.56	0.17
Nurse Anesthetist	0.86	0.14	0.96	0.16	0.99	0.14	1.32	0.26
Researcher	0.11	0.05	0.15	0.07	0.15	0.06	0.13	0.09
Private duty nurse	0.88	0.15	0.49	0.12	1.63	0.19	0.59	0.17
Other	4.02	0.31	3.75	0.33	4.05	0.31	3.61	0.45
Not reported	0.40	0.11	0.26	0.09	0.28	0.07	0.43	0.14
Not employed in nursing	22.36	0.66	17.68	0.66	23.86	0.67	18.40	0.91

Table D-6 (Continued)

Characteristic	Region					
	West South Central		Mountain		Pacific	
	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Field of employment						
Hospital	51.27	1.22	48.52	1.01	52.94	1.06
Nursing home/extended care facility	3.45	0.45	5.31	0.44	4.52	0.43
Nursing education	3.44	0.44	2.86	0.33	2.60	0.33
Public/Community health	4.74	0.49	5.15	0.43	4.55	0.45
School nurse	3.44	0.46	3.59	0.40	2.63	0.37
Occupational health	1.38	0.28	1.41	0.24	1.32	0.25
Physician/Dentist Assistant	4.00	0.47	4.53	0.41	5.15	0.45
Private duty	0.74	0.21	0.80	0.22	0.49	0.16
Other, self-employed	0.79	0.22	0.72	0.15	0.74	0.18
Other	1.39	0.28	1.14	0.20	1.75	0.29
Not employed in nursing	24.70	1.07	25.28	0.91	22.67	0.87
Not reported	0.66	0.21	0.69	0.22	0.64	0.17
Type of position						
Administrator/Assistant	5.80	0.57	3.02	0.32	3.05	0.37
Consultant	0.81	0.24	0.34	0.11	0.47	0.13
Supervisor	5.85	0.55	4.42	0.42	3.95	0.42
Instructor	4.08	0.48	3.45	0.36	3.17	0.37
Head nurse/assistant	6.05	0.58	3.63	0.37	5.52	0.50
Staff/general duty	43.70	1.21	50.56	1.01	50.52	1.06
Nurse practitioner	0.83	0.21	1.77	0.27	1.41	0.25
Clinial specialist	1.58	0.33	1.80	0.28	2.24	0.33
Nurse Clinician	0.33	0.14	0.47	0.13	0.68	0.16
Nurse Anesthetist	1.43	0.28	0.68	0.15	0.83	0.19
Researcher	0.15	0.07	0.19	0.09	0.15	0.09
Private duty nurse	1.06	0.25	0.86	0.23	0.68	0.18
Other	3.24	0.44	2.93	0.32	4.01	0.42
Not reported	0.39	0.16	0.58	0.20	0.48	0.13
Not employed in nursing	24.70	1.07	25.28	0.91	22.67	0.87

[1]Includes only registered nurses living or working in the United States.

[2]Estimates not available.

Table D-7 Standard Errors (S.E.) of Selected Statistics for Registered Nurses Licensed in the U.S., by Region

Characteristic	Total United States				Region			
					New England		Middle Atlantic	
	Estimated Number	S. E. of Estimated Number	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Employment in nursing-1979								
Yes	1,210,608	4,999	72.82	0.30	71.17	0.98	71.00	0.82
No	376.042	4,711	22.62	0.28	24.80	0.94	24.91	0.78
Not reported	75,734	(2)	4.56	0.13	4.03	0.40	4.09	0.35
Employed in nursing-1980								
Yes	1,272,852	4,777	76.57	0.29	75.11	0.94	74.22	0.79
No	388,537	4,773	23.37	0.29	24.87	0.94	25.78	0.79
Not reported	994	255	0.06	0.02	0.02	0.02	0.0	0.0
Employment Status								
Employed in nursing full-time	854,813	5,558	51.42	0.34	42.17	1.05	50.39	0.91
Employed in nursing part-time	404,943	4,757	24.36	0.29	32.26	1.01	23.15	0.77
Employed in nursing full/part-time not reported	13,096	1,001	0.79	0.06	0.68	0.18	0.69	0.15
Employed in other occupation	75,664	2,363	4.55	0.14	5.29	0.49	4.92	0.40
Not employed	300,830	4,364	18.10	0.26	18.96	0.86	20.11	0.73
Not employed in nursing/ status not reported	12,042	926	0.72	0.06	0.62	0.17	0.75	0.16
No response	994	255	0.06	0.02	0.02	0.02	0.0	0.0

Table D-7 (Continued)

Characteristic	Region							
	East North Central		West North Central		South Atlantic		East South Central	
	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Employment in nursing-1979								
Yes	73.32	0.70	77.30	0.73	72.86	0.69	74.42	1.02
No	21.99	0.66	17.72	0.66	22.43	0.65	17.62	0.89
Not reported	4.69	(2)	4.98	(2)	4.71	(2)	7.96	(2)
Employed in nursing-1980								
Yes	77.64	0.66	82.33	0.66	76.14	0.67	81.60	0.91
No	22.36	0.66	17.67	0.66	23.82	0.67	18.18	0.90
Not reported	0.0	0.0	0.0	0.0	0.03	0.02	0.22	0.11
Employment Status								
Employed in nursing full-time	49.41	0.80	50.52	0.86	56.31	0.76	65.67	1.12
Employed in nursing part-time	27.61	0.71	31.33	0.79	18.97	0.58	15.08	0.84
Employed in nursing full/part-time not reported	0.62	0.13	0.47	0.12	0.87	0.13	0.86	0.21
Employed in other occupation	4.24	0.32	3.93	0.34	4.21	0.31	2.85	0.04
Not employed	17.55	0.61	13.14	0.60	19.05	0.63	14.53	0.84
Not employed in nursing/ status not reported	0.56	0.12	0.60	0.13	0.57	0.12	0.80	0.20
No response	0.0	0.0	0.0	0.0	0.03	0.02	0.22	0.11

Table D-7 (Continued)

Characteristic	Region					
	West South Central		Mountain		Pacific	
	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent	Estimated Percent	S. E. of Estimated Percent
Employment in nursing-1979						
Yes	73.52	1.07	70.53	0.95	74.09	0.92
No	22.99	1.04	25.15	0.91	21.89	0.86
Not reported	3.49	(2)	4.32	(2)	4.02	(2)
Employed in nursing-1980						
Yes	75.31	1.07	74.72	0.91	77.33	0.87
No	24.70	1.07	25.26	0.91	22.65	0.87
Not reported	0.0	0.0	0.02	0.02	0.02	0.02
Employment Status						
Employed in nursing full-time	60.14	1.21	48.27	1.02	49.31	1.07
Employed in nursing part-time	14.05	0.84	25.50	0.89	29.91	0.95
Employed in nursing full/part-time not reported	1.11	0.29	0.95	0.23	1.11	0.23
Employed in other occupation	4.67	0.55	5.99	0.52	4.56	0.43
Not employed	19.15	0.97	18.28	0.82	17.55	0.80
Not employed in nursing/ status not reported	0.88	0.22	0.99	0.20	0.55	0.13
No response	0.0	0.0	0.02	0.02	0.02	0.02

[1]Includes only registered nurses living or working in the United States.

[2]Estimates not available.

Table D-8 Standard Errors of Estimated Mean Salary of Registered Nurses[1], by Region

Characteristic	Total United States			Region								
				New England			Middle Atlantic			East North Central		
	(n)	Mean Salary	Standard Error	(n)	Mean Salary	Standard Error	(n)	Mean Salary	Standard Error	(n)	Mean Salary	Standard Error
Type of position												
Administrator/assistant	1,159	21,103	284	116	22,082	976	100	21,926	753	171	20,659	702
Consultant	154	16,581	809	18	14,178	1,891	7	8,928	3,142	21	16,399	1,818
Supervisor	1,360	17,178	213	126	17,562	507	141	16,186	538	168	16,854	642
Instructor	1,129	16,552	244	102	14,827	817	102	16,814	703	169	16,897	560
Head nurse/assistant	1,581	17,872	142	138	16,891	396	182	17,148	348	216	18,510	327
Staff/general duty	14,519	13,560	62	1,436	11,964	161	1,502	13,175	178	2,160	13,282	126
Nurse practitioner	323	17,986	501	30	16,509	1,036	29	15,815	1,009	35	16,730	1,000
Clinical specialist	336	17,043	445	37	15,174	1,438	22	15,570	1,266	21	15,423	1,085
Nurse clinician	162	16,360	1,001	18	13,774	1,423	7	15,002	2,167	18	17,793	1,890
Nurse anesthetist	292	29,167	862	18	18,679	2,584	26	25,620	2,781	40	31,630	1,826
Researcher	42	13,830	1,072	2	12,170	2,035	7	12,671	2,220	5	18,596	588
Private duty nurse	324	8,461	432	61	7,733	878	73	8,251	709	35	9,140	1,129
Other	1,029	15,953	281	95	12,938	761	103	16,097	913	165	16,022	589
Entire region	22,454	14,956	56	2,204	13,313	157	2,306	14,339	155	3,230	14,794	124

Table D-8 (Continued)

Characteristic	West North Central			Region: South Atlantic			East South Central			West South Central		
	(n)	Mean Salary	Standard Error	(n)	Mean Salary	Standard Error	(n)	Mean Salary	Standard Error	(n)	Mean Salary	Standard Error
Type of position												
Adminstrator/assistant	171	19 368	675	174	20,286	452	96	20,178	868	138	19,479	681
Consultant	24	15,191	1,810	29	19,629	1,269	13	14,510	1,999	16	18,103	2,474
Supervisor	180	16,441	393	235	16,574	379	107	16,731	518	142	18,264	541
Instructor	151	15,658	553	200	16,254	529	101	16,375	607	98	16,888	622
Head nurse/assistant	195	17,309	389	307	17,516	269	115	16,221	562	139	17,400	512
Staff/general duty	2,025	12,493	141	2,380	13,493	141	895	13,612	165	984	14,737	214
Nurse practitioner	32	15,641	1,123	57	17,766	704	18	19,531	934	21	17,116	1,206
Clinical specialist	30	16,682	1,060	63	17,668	1,067	20	16,743	1,652	28	18,710	967
Nurse clinician	19	13,262	1,296	39	20,938	3,921	11	16,439	2,483	8	15,814	1,459
Nurse anesthetist	38	27,847	1,152	56	25,203	1,030	23	31,610	1,454	38	36,704	2,988
Researcher	5	11,840	3,778	8	18,353	2,570	2	13,487	1,050	5	13,922	2,531
Private duty nurse	17	5,987	1,306	69	9,109	1,342	9	8,058	1,668	23	10,732	2,159
Other	129	14,776	591	191	15,497	484	67	15,411	739	67	15,775	884
Entire region	3,021	13,902	127	3,810	14,869	123	1,479	15,107	165	1,711	16,301	199

Table D-8 (Continued)

Characteristic	Region					
	Mountain			Pacific		
	(n)	Mean Salary	Standard Error	(n)	Mean Salary	Standard Error
Type of position						
Adminstrator/assistant	97	19,485	834	96	25,499	1,198
Consultant	10	15,970	3,118	16	20,977	2,222
Supervisor	130	18,416	550	131	19,616	881
Instructor	102	16,979	1,300	104	17,469	918
Head nurse/assistant	110	18,032	592	179	20,434	423
Staff/general duty	1,509	13,338	175	1,628	15,831	222
Nurse practitioner	52	20,966	2,914	49	21,361	1,503
Clinical specialist	52	16,024	761	63	18,460	1,095
Nurse clinician	16	14,740	1,367	26	14,415	1,324
Nurse anesthetist	24	31,758	2,202	29	31,393	2,512
Researcher	5	7,899	2,647	3	10,687	2,009
Private duty nurse	21	5,755	1,088	3	9,552	1,889
Other	93	15,349	766	119	19,122	853
Entire region	2,228	14,734	182	2,465	17,277	197